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The "introduction" to this report summarizes the subcommittee's 1962-63 effort to identify elements of good college teaching through the sponsorship of 2 seminars composed of "some of the good or outstanding teachers in 2 sections of the United States." The body of the report consists of materials which grew out of the seminars. Chapter 2, "Pilot Research on Successful College Teaching," is a report by Robert E. Bills, University of Alabama, on research he pursued through use of a teacher problems Q-sort to gather information about characteristics of the 1962 seminar participants. Chapter 3, "The Improvement of College Teaching" by Leonard W. Rice, President, Oregon College of Education, is a paper he presented to the 1963 group on the factors which contribute to good teaching, including the use of technology. Chapter 4 is excerpts from working papers written by each participant and read by the others as springboards for discussion of such seminar topics as the use of techniques and resources, selection of objectives, maintenance of professional competence, evaluation procedures, and relations with students. In Chapter 5 the editor summarizes the results of participant questionnaire evaluations, and in Chapter 6 presents a distillation of "Suggestions for the Improvement of College Teaching." A 53-item list of "Suggested References on College Teaching" is also included. (JS)

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NUMBER 8

THE AMERICAN ASSOCIATION OF COLLEGES FOR TEACHER EDUCATION

The American Association of Colleges for Teacher Education, an autonomous department of the National Education Association, is a national, voluntary association of colleges and universities organized to improve the quality of institutional programs of teacher education. All types of four-year institutions for higher education are represented in the present membership. These include private and church-related liberal arts colleges, state teachers colleges, state colleges, state universities, private and church-related universities, and municipal universities. The teacher-education programs offered by the member institutions are varied. Only one uniform theme dominates the AACTE—the dedication to ever-improving quality in the education of teachers.

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COLLEGE TEACHERS
LOOK AT
COLLEGE TEACHING

Report by the
Subcommittee on the Improvement of Instruction
of the Committee on Studies

1965

THE AMERICAN ASSOCIATION OF COLLEGES
FOR TEACHER EDUCATION

SP001595

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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FOREWORD

The Subcommittee on the Improvement of Instruction of the American Association of Colleges for Teacher Education's Committee on Studies sponsored a project to identify elements of good college teaching. Two seminars in two different sections of the United States were organized and directed by the Subcommittee. This report describes and attempts to evaluate these seminars.

The members of the Subcommittee on the Improvement of Instruction included:

Harold E. Hyde, Chairman; President, Plymouth Teachers College, Plymouth, New Hampshire

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Richard E. Lawrence, AACTE, Associate Secretary for Research and Studies, served the Subcommittee as its staff officer.

Editing this report was the responsibility of Carl H. Gross, who also wrote Chapters 1, 5, and 6. Credit should also be given for major editorial assistance for the entire document and especially Chapters 2, 3, and 4 to Roslyn S. Blum, Editor, College of Education, Michigan State University, East Lansing, Michigan. John W. Delonas, graduate student in the College of Education, also assisted in compiling the data from the seminar.

HAROLD E. HYDE, Chairman

Plymouth, New Hampshire

CHAPTER 1 Introduction

In 1958, the Committee on Studies of the American Association of Colleges for Teacher Education discussed some major areas of concern of the organization. Appropriately, it chose for special study the improvement of college teaching, and in the following year established the Subcommittee on the Improvement of Instruction.

The improvement of college teaching is one of the most critical challenges in higher education. American colleges and universities face the problem of assuring sufficient numbers of qualified faculty members in the years immediately ahead. The challenge is not only to secure newly prepared college teachers, but also to retain and to improve instruction of faculty members currently employed. Both approaches are essential if colleges and universities are to meet staffing needs for increased enrollments and changing curricula.

In addition, the same criticisms leveled against secondary school teaching have also been directed toward college teaching. Without doubt some of these criticisms are valid. Also, the attention given by professors to research and publication at the expense of teaching has been emphasized in many books critical of higher education. Thus, there was indeed reason enough for the American Association of Colleges for Teacher Education to consider the improvement of instruction as a worthy subject for study.

The Subcommittee on the Improvement of Instruction soon realized that its charge had many dimensions. Its members were also aware that some basic issues confronted them. What is good instruction? How is good teaching measured? Can instruction be improved? Even the "old chestnuts" were trotted forth. The Subcommittee recognized that an argument could easily be provoked in academic circles simply by raising the question of whether teachers are born or made, whether teaching is an art or a science, or whether a good teacher needs anything beside a thorough knowledge of his subject matter.

The Subcommittee on the Improvement of Instruction addressed itself to several aspects of the problem in the five years of its existence. It studied recruitment and appointment policies of college faculty members; orientation procedures for new faculty members; self-evaluation techniques for faculty members; and institutional policies regarding recognition for good teaching through promotions, salary increases, special privileges or honors extended recognized teachers, and the like. The results of these studies together with outstanding practices were published in 1962 by the American Association of Colleges for Teacher Education in its Study Series Number 6, Improvement of Instruction in Higher Education.

All of these activities served one goal, namely, the improvement of college teaching. Improved college teaching, so needed today, most probably requires a multipronged approach. Though some pessimists claim that there are no means of solving this problem because judgments concerning it are basically subjective, some interesting conditions do exist. Nearly every campus has some acclaimed great teachers. A visitor, on a campus only briefly, will quickly hear students describe one or more faculty members as outstanding instructors. Whether or not these assessments are completely subjective, evaluations of teaching ability are made by students, remembered with nostalgia or distaste by alumni, and consciously or unconsciously used by administrators when promotions are determined, salary increases allotted, or tenure determined. Thus, those individuals who object to the evaluation of teaching as being subjective still cannot eliminate the fact that some teachers are better than others and are so acclaimed. Many of the same critics who look with a great deal of skepticism upon any evaluation of teaching appear satisfied when research, publications, speeches, professional papers, and membership in professional societies are often evaluated by a quantitative rather than qualitative means. Even when satisfied that evaluation occurs upon a qualitative basis, these critics forget that subjectivity rather than objectivity often determines which professor is considered the greater writer, researcher, or speaker.

Since each campus evidently has some recognized good teachers, the Subcommittee felt that these teachers' objectives, techniques and attitudes might provide dimensions for studying the qualities which make for good teaching. It was therefore decided to bring together some of the good or outstanding teachers in two sections of the United States and share their experiences and attitudes regarding teaching in the hope that these reactions would offer some clues regarding good teaching and in turn could be used for the improvement of instruction. As far as the Subcommittee was aware this approach to the problem had not been tried before.

Realizing that it would be impossible to choose the best teacher on each campus because of the subjective factors involved, the Subcommittee asked presidents, deans, or designated AACTE representatives on the various campuses involved in this study to recommend an outstanding teacher to attend the seminar. Understandably some administrators were hesitant to designate a representative. Practically all administrators were anxious to point out that they were not sure that the person chosen by them was the outstanding teacher. On the other hand, nearly all the administrators insisted that the faculty member chosen was one of the outstanding teachers and quite a number informed the Subcommittee that their faculty contained several outstanding teachers who should attend the seminar.

Since the basic purpose of the seminar was to identify elements of good teaching, the number in attendance had to be small enough so that discussion groups would be manageable and fruitful. It also seemed advisable to develop this type of seminar in two sections in two different years in order to have some basis for comparison before generalizations could be made from this limited sample.

The first seminar was conducted in Louisville, Kentucky, in 1962, to serve the Southeastern area of the United States. The second seminar was held in Portland, Oregon, in 1963, to serve the Northwestern section. The basic reason that these two areas were chosen was that AACTE conferences tended to be held in the Midwest, and since the AACTE is a national organization, it appeared appropriate that some areas heretofore somewhat neglected should be used for the study of this problem. The Subcommittee made no judgment on whether either of these areas had the superior or outstanding college faculties or whether there were some unique sociological problems of the regions which might be studied. Institutions in both regions were highly receptive to participation, and although the respective institutions of higher learning had to pay the expenses of the participants, excellent cooperation was received from the member institutions.

The disciplines, backgrounds and types of institutions represented by the participants in the seminar were extremely diverse. Had the Subcommittee purposely chosen the participants to insure their diversity, it could hardly have done better. Small and large colleges were represented. State multi-purpose universities, teachers colleges, private and denominational colleges, and liberal arts colleges sent their good teachers. Faculty members of all ages, differing years of experience and of both sexes were in attendance. Nearly all the disciplines were represented, and in such relativity equal proportions that no one discipline was particularly over-represented. There was a satisfactory cross-section of faculty members in nearly every significant category.

After the participant was invited, he was asked to write a working paper to be read by all other participants before coming to the seminar. This offered some common ground for the discussions. So that others could also benefit from these papers, highlights from them have been reproduced in this pamphlet. The excerpts from these papers may stimulate thought just as they stimulated discussion at the seminars. These highlights may also suggest some objectives, teaching techniques and means of evaluation, which may be valuable to the college teacher who would care to improve his own teaching. The ideas which came out of the small group discussions unfortunately cannot be recaptured for publication. It can only be hoped that these ideas and the discussions which followed may have helped the participants to analyze their own teaching and perhaps improve it. Even though these people were considered superior teachers, it is felt that the exchange of ideas at the seminars was reflected in the classrooms after the participants returned home.

In order to add variety to the seminars, a few keynote speakers were obtained. Although space does not permit us to reproduce all of the addresses, the talk by President Rice of the Oregon College of Education was so outstanding that it is presented in Chapter Three as a sample of this phase of the seminar.

No doubt the informal exchange of ideas about teaching and about the problems of the college teacher which took place during the coffee breaks and at meals played as important a part in the improvement of college teaching as the more formal aspects of the seminars. It is hoped that this report will also provoke the kinds of formal and informal interchange of ideas in coffee rooms, or in offices or in faculty meetings as those which took place at the seminars. What more important topic is there to discuss in a university than "What is a good teacher?" And that is the subject of this report.

CHAPTER 2

Pilot Research on Successful College Teaching

ROBERT E. BILLS

University of Alabama
University, Alabama

In this report presented at the first seminar for the Improvement of College Teaching, Dr. Bills faces a fundamental question that confronts all those committed to improved college education: what makes a good college instructor? Furthermore, are there objective measures which identify characteristics that differentiate the mediocre, the average, and the outstanding college instructor? In this connection the works of Rogers and Barrett-Lennard are important to our understanding of the personality of a good teacher. They suggest the possibility that the ability of a teacher to help students may be related directly to his place on the continuum that extends from a state of being closed to experience, or "stasis" to that of being open to experience, or in a state of "process" and also relate to his consequent reflection of congruence, empathy, positive attitudes and unconditional helpfulness.

One purpose of this AACTE-sponsored seminar was to gather information about the characteristics of the participants in the hope that it would be valuable in further understanding personal characteristics associated with successful college teaching. Dr. Bills in his report describes the research he pursued on this problem with this group, (the participants at the 1962 Louisville seminar) and with another group of staff members of a college of education.

The Development and Validation of a Measure of "Process"

Previous methods of measuring "process" have involved the analysis of interview material. Because it is difficult to obtain data of this type and to score it reliably, the author sought another method by assessing "process". In therapy interviews, people discuss their problems and from the nature of the discussion, inferences are made about the position of the client on the "process" continuum. Would a study of teachers' problems be useful in assessing "process?"

To answer this question, about 500 teachers in graduate classes were asked to describe, briefly, the problems which gave them greatest concern as teachers. From the numerous one-sentence descriptions given by the teachers, 84 problems were selected as representative of the entire range of their concerns. Three judges working independently of each other rated the problems for "process-stasis" characteristics using the following dimensions: 1) Did the problem reflect a positive or a negative attitude toward self, others, or things? Negative attitudes were considered to be characteristic of problems and people nearer the "stasis" end of the scale and positive attitudes were considered to be characteristic of problems and people nearer the "process" end. An example of a "stasis" type of attitude is the statement: "My most pressing problem is the inability on the part of children to think for themselves." An example of a "process" type of attitude is reflected in the statement: "My most pressing problem is learning how to become the most positive educational influence in the lives of my students that I can be." 2) Was the problem of a self or a non-self nature? A problem dealing with self was considered to be more chaeacteristic of the "process" teacher and a non-self problem was considered more characteristic of the "stasis" teacher. The two problems described above illustrate this characteristic. 3) Where was locus of responsibility for the solution of the problem—in the teacher or external to the teacher? The two problems cited above illustrate this dimension and is best described by answers to the question, "Who must change in order to solve the problem—the teacher or the student?" Problems dealing with the self were considered more "process-like" than problems dealing with other people or things. 4) Was the problem a problem or a symptom of a problem? Asked in another way, "Was the problem a central or a peripheral one?" The problems already cited illustrate this dimension since inability of children to think for themselves is symptomatic of a failure of education and self improvement of teachers is a central problem. 5) What was the time orientation of the problem? Problems oriented only to the present and/or past were considered to be nearer the stasis end of the continuum while problems directed toward the future or implying change in the teacher were assumed to be nearer the process end of the scale. The two problems illustrate this dimension. The first problem deals with what the children are like now and the second deals with how the teacher must become in the future. These five dimensions apparently are not orthogonal.

Only minor disagreements occurred among the judges in making their ratings of each of the problems, but for scoring purposes only the 39 items on which there was complete agreement were included. A teacher is given a packet of 84 cards, each one of which contains a numbered problem. The teacher is then asked to sort the problems to describe the most pressing problems he experiences. To do this, the cards are sorted into 11 piles or categories effecting a quasi-normal distribution. A completed description has the 1 most pressing problem in category 11, the 2 next most pressing problems in category 10, the 6 most pressing in category 9, and so on with 11, 14, 16, 14, 11, 6, 2, and 1 problems in categories 8 through 1 respectively.

Validity of the Teacher Problems Q-sort

The question, "Is the teacher problems Q-sort, described above, a valid measure of process?" remained unanswered. To check this, the staff members of two elementary and one senior high school in the same school system were asked to sort the problems. These schools included 62 teachers. The superintendent and the principals of the schools were asked to estimate the success of the teachers by dividing each faculty into two groups, the more and the less successful halves. Double dichotomous chi-squares were computed between ratings of success and "process' scores, the "process scores of each faculty member being divided at the median of the "process" scores for each group. The obtained chi-squares were associated with probability levels of .01, .001, and .02. Thus, there was reason to conclude that a significant relationship existed between "process" as shown by the Q-sort descriptions and ratings of success given the teachers by their administrative officers.

Another question appeared important, "To what extent do the members of a school faculty agree with each other on their problem descriptions?" High agreement would indicate that the teachers were describing a common situation. Low agreement would not necessarily indicate a valid measure of process but would support a conclusion that the problem descriptions were either random or a product of the personal characteristics of the teachers. An elementary school faculty including 35 teachers and a high school faculty (a siz-year high school) including 27 teachers were selected for study. For each of the groups, the Q-sort descriptions were intercorrelated and the mean correlation of each matrix was determined. For the elementary school staff, the mean correlation was .35 and for the high school staff .25 showing that the staff members agreed to only a limited extent with each other on the nature of the teaching problems existing in the school. This study has been replicated with the staffs of six other schools with comparable results.

Are the "process" characteristics of teachers, as revealed by the Q-sort, related to pupil characteristics? To answer this question, pairs of teachers in grades 3 through 6 were obtained. These teachers were measured for "process" by means of the Q-sort and then assigned to one of two groups on the basis of their scores; one group thus having higher 'process" scores than the other. The children in these grades were then given the Index of Adjustment and Values, Elementary and Junior High School Forms (1962), to measure their attitudes toward self and others. The group of pupils taught by the teachers with low process scores numbered 117 while the teachers with higher process scores taught 110 students. The results of this testing showed, at less than the .05 level of confidence, that pupils taught by teachers with higher process" ratings have more positive attitudes toward self and others than pupils taught by teachers with lower "process" ratings.

In another study, repeated by Emerling (1961) who used an expanded and more exact design, it was determined that teachers with higher "process" scores are seen by their students in grades 9 through 12 as more empathic, congruent, unconditional and positive. In other words, the higher the degree of "process" of the teacher, the more he is seen by his students as possessing the characteristics needed for the personal development of students.

In a further study, Bills (1963), selected two secondary schools with similar student enrollment, drawing students from similar socio-economic levels, and with a small amount of teacher turn-over between the 1962-63 and 1963-64 school years. He then measured the teachers for "process" and found that the teachers in School #1 had significantly higher "process" scores than the teachersin School #2.

An examination of the intercorrelations among the Q-sorts in each of the schools showed that more satisfactory inter-staff communication was present in School #1 than in School #2.

Students in the two schools were tested for attitudes toward their schools and the resulting data showed that students in School #1 had significantly more positive attitudes than students in School #2.

When students were asked to describe their perceived relationships with their teachers, students in School #1 described more helpful relationships than students in School #2.

Finally, achievement records were examined for two grade levels (eighth and eleventh) for the two schools. In only one instance did mental maturity differ significantly between the two schools and this difference favored School #2. However, significant differences appeared at both grade levels and favored the students in School #1. Not only did the students in School #1 achieve more highly than the students in School #2, but it was noted that the subtests showed that the average student in School #1 was an overachiever as judged by the average mental maturity scores and that fluctuations above and below expectancy for students in School #2 appeared to be random.

Because of the results discussed above, it was decided to construct a Q-sort, based on problems of college teachers, to measure the process qualities of the participants in the Louisville Seminar.

The College Teacher Problems Q-sort

Staff members in the School of Education at Auburn University, Auburn, Alabama, and in the College of Education at the University of Alabama, University, were asked to submit lists describing, as briefly as possible, their major problems as college teachers. The lists which were submitted appeared to have the same qualities as those submitted by public school teachers on which the previously reported research was based. Thus, 84 problems were selected to represent the entire list and were used in a Q-sort by both the Louisville Seminar participants and the staff of an education college.

Validity of the College Teacher Problems Q-sort

Three primary sources of evidence are available to attest to the validity of the College Teacher Problems Q-sort as a measure of "process". One of these will be discussed below when the scores of the seminar participants and the education college staff members are compared. This discussion will show that the group with the higher "process" scores described their problems as more central, more self-oriented, more future-related, and more positive in attitude than did the group with the lower "process" scores. Thus, there appears to be a relationship between the scores of the Q-sort and the types of concerns projected in the sorting of the instrument.

Additional validity data are available from the work of Freeze (1963). In his study, Freeze showed that staff members who score above the median of their group in "process" as measured by the College Teacher Problems Q-sort are seen by their students as capable of more helpful relationships with their students than are those staff members who score below the median of their group. The more "in process" the college teacher, as shown by his Q-sort score, the more helpful he appears to his students.

Freeze also demonstrated that the effect of placing student teachers in contact with low "process" supervising and cooperating teachers causes significant decline in the "process" characteristics of these student teachers.

"Process" Scores of the Seminar Participants

The participants in the Louisville Seminar were asked to sort the problems of the College Teacher Problems Q-sort and 34 of them gave usable returns. The scores of these 34 respondents had a mean of 19.28 and a standard deviation of 9.35. Judged by the fact that the possible range of scores was from -68 to +68, this appears to be a low mean for a group of teachers selected as outstanding.

For the purposes of comparison the staff of an education college was asked for volunteers to sort the problems. About 50 percent of the staff volunteered and results are available from a group of 28 college teachers not included in the seminar. The mean of this group was 38.43 and the distribution had a standard deviation of 10.13. A comparison of the means of the two groups showed that the mean score of the education staff members was significantly higher than that of the seminar participants at less than the .01 level. Since only 50 percent of the education college staff participated possible bias is present in this group. This bias, though, should not have operated to cause the education college staff sample to appear as a more outstanding group of teachers than the AACTE group unless it is argued that only outstanding staff members volunteered to take part. This argument would then have to include a conclusion that the education college staff was composed of a large proportion of outstanding teachers.

Differences in the Composite Q-sorts

Ordinarily, differences in ratings given two items on each of two Q-sorts must be considerable (at least two categories difference in the two sortings) to be significant. Such large differences need not exist, however, when comparing composite sorts and especially when based on the size "N's" involved in this study, since consistent differences must be present to cause items to differ by even one category in their placement. Because of this all differences in item placement are considered in the following discussion.

The greatest number of differences in the placement of items related to those items dealing with students, their learning and other characteristics.

The items which were concerned with students and which were given a higher rating by the AACTE seminar group than by the education college staff were:

9. Students taking courses for which they have no background nor ability to pass,

17. Students who are more concerned about grades than their educational development,

22. Students wanting to be on an equal basis with teachers,

42. Students who lack a sense of responsibility,

50. The poor quality of students emerging from high schools,

54. Students who lack the ability to profit from college work,

56. Students who have not been prepared adequately by former teachers,

63. Inability of some students to learn, and the fact that they sometimes retard or slow down more intelligent pupils,

80. Students' lack of concern in developing high standards,

83. Students' inability to do critical thinking.

Although some of these items deal with the act of teaching (Nos. 17 and 56), they likewise deal with students' perceptions. The items which were concerned with students and which the college education staff gave a higher rating than the seminar participants, were as follows:

41. Chronic absenteeism,

71. Rigidity of some students to the introduction of new teaching methods.

One of these items (41) although expressing a negative attitude, expresses it toward the behavior of students and not toward them as a group. The other item deals both with a negative aspect of students and the difficulties in the teaching act. The most obvious difference in the two groups of items is the fact that only two items appear in the group which were given higher ratings by the education college staff and thus it is concluded that the seminar participants had more negative perceptions of students.

Many differences appeared in the ratings given by the two groups to items dealing with teaching. The items which the AACTE seminar group gave higher ratings were:

15. Learning new ways to help students develop their maximum potentials,

18. Helping students to apply knowledge,

19. Continuing to develop new and better ways of getting students to participate in classwork with their full attention,

33. Learning new ways of motivating students,

49. Making precise assignments in order to provide students with the greatest help,

56. Difficulty of getting students to do as much independent reading as necessary,

61. Ways to constantly change curricular practices to adjust to latest ideas and research findings,

74. Learning better ways to help students see themselves as "professionals",

75. Helping superior students to work at the level of their full capacity,

77. Teaching students how to read and understand what they have read.

These items are concerned, primarily, with teaching although they also include some attitudes toward students. By inference, students are not working up to their maximum potentials, are not participating in class work with their fullest attention, are not motivated as they might be, do not do the independent reading they should, do not know how to read and understand as they should, and do not perceive themselves as professionals.

Most interesting, though, is the role-concept projected. Most of the items suggest that the important problems relate to how to teach in such a way that students are changed. The instructor will change to permit greater change in the student. Projected, also, is a role for teaching in which the teacher leads and directs and students follow. This is suggested by items 18 and 33, and especially by items 19, 49, 56, and 74.

The "teaching items" given higher ratings by the education college staff were:

1. Knowing students as individuals,

3. Becoming more effective in helping students want to learn what is important,

13. Effective utilization of time so that each class period contributes to achievement of the course objectives,

21. Changing classroom emphasis to avoid the criticism of the public and other teachers,

23. Learning better ways of approaching students to help them become increasingly self-directing,

30. Finding and budgeting time wisely to do the many professional things which a college teacher would like to do,

36. Finding interesting new approaches to old subject matter for new students,

37. Discovering ways to continue to improve teaching in a fast-changing world,

48. Teaching in a framework which does not permit following self-identified problems of students,

65 Continually developing spontaneously warm and appreciative responses to students,

68. Making student evaluation a meaningful process in terms of their learning,

70. Establishing relationships with students to provide for an optimum learning climate,

81. Continuing to become more genuine and open with students.

84. Knowing more about requirements for effective job performance and ways to help students achieve this.

Almost without exception these problems are stated in a positive mode and deal with the improvement of teaching performance toward a more self-directing role on the part of the students. Quite obviously, students are important people and it is important for the teacher to teach in a way which helps them to utilize their capacities. Moreover, it seems important to these teachers to know their students as people and to provide them with relationships which will enable them to grow.

Another group of problems dealt with relationships with other members of the teaching staff. The items which the AACTE seminar group gave higher ratings were:

29. Inefficiency and ineptitude of some instructors who make it difficult for those who really want to help the students,

39. Not enough uniformity in what is expected of students from different teachers,

43. Lack of cooperation from other teachers and sometimes the administration in solving teaching problems.

All three of these items include negative attitudes. None of them are self-oriented or imply any need for the teacher to change.

Four items in the area of relationships with other staff members were given higher ratings by the education college staff:

1. Criticism from other members of the institution,

25. Faculty members who are looking only for professional advancement,

34. Ways of sharing professional ideas among faculty members,

55. The demonstrated lack of willingness of professional staff members to work together cooperatively to develop a unity of purpose and function.

In general, these items are as negative and non-self oriented as those given a higher placement by the AACTE seminar participants. Item 34 is one notable exception and states that sharing professional ideas among faculty members is important, thus suggesting that other staff members are important and that it is valuable to communicate with them.

Another group of differences in the placement of items dealt with a category which can be called administrative and administrators. In this group the items which were given a higher placement by the AACTE seminar group included:

24. Inequalities of staff loads,

45. Keeping abreast of individual responsibilities in light of the institution's requirements,

47. Administrative leadership which fails to "set teachers' sights,"

66. Administrators who are more interested in quantity than in quality,

72. Inadequate library facilities.

With the possible exception of item 45, these items reflect negative attitudes toward situations, toward things (library), and toward people (administrators). No item suggests responsibility on the part of the instructor to help solve it. Interestingly enough, the relationship between staff member and administrator seems to parallel that seen as desirable between staff and student. The role of staff members seems to follow the leadership of the administration in much the same way that the role of the student follows the leadership of the instructor.

In the administrative and administrator category, the following items were given priority by the education college staff:

6. Reliance on undependable and inefficient secretarial help,

2. Lack of necessary supplies and equipment,

60. Knowing and doing what administrative officers expect and at the same time helping them to examine their expectations.

Two of these three items reflect negative attitudes. One of these directs its attention to supplies and equipment and the other to secretaries, peripheral members of the teaching staff. To what extent are these realistic "gripes"? The third problem, though, is a most interesting one. While stating a problem it does not state an attitude and it suggests a responsibility of the staff to work with administrators in effecting mutually acceptable solutions to problems. If this item is characteristic of this staff role, it suggests a more cooperative ideal on the part of the education college staff than that suggested by the problems of the AACTE seminar group.

One other problem was given a higher rating by the AACTE group than by the education staff. This item deals with "The rapid tempo of education that causes students to charge through college effectively cheating themselves from becoming educated." Although there may be some truth in this problem, it should be noted that since this view has become somewhat a characteristic of the American higher education scene (for example, increased summer enrollments, movement toward the quarter system or not returning to the semester system after World War II, and the introduction of the trimester plan) there appears to be a tendency to hold on to the past and perhaps to roll back time.

Three additional problems were given higher ratings by the education staff:

4. Achievement of professional security in an insecure profession,

20. Too great an emphasis on sports and extra-curriclar activities,

79. Lack of appreciation of the teacher's work in this culture.

Items 4 and 79 appear to be "out of character" with the other higher items of the education college group and reflect defensiveness and negativism. Item 20 appears to be understandably higher in this group than in the AACTE group when the size of the institution (as shown by the questionnaire results) is compared with the size of the institutions represented in the AACTE seminar.

Concerns Shown by the Composites

When the top four categories of each of the composites are examined, an important feature emerges which is useful in describing both of the groups. All items in the top four groups deal either with teaching or with students and primarily with the former. No items dealing with factors other than students or teaching are included in the top four groups.

One of the biggest differences in the two composites is shown by item 75 and reflects a differential concern for the superior student. The AACTE seminar group placed this item in category 10 whereas the education college staff placed it in category 8.

Overall the top categories seem to paint a picture of the AACTE teachers as people who take a more dominant role in directing students toward worthwhile objectives. Concern is shown with motivating students, helping them to know how to apply knowledge, directing their reading, helping students perceive themselves as "professionals," helping students see purpose in their work, and presenting subject matter in a way that students can get the most out of it.

On the other hand the education college staff appears to be working toward a more self directing role on the part of the students and sees some of the major problems of instruction arising from an implementation of student growth, helping students to become increasingly self-directing, helping students to want to learn what is important, and getting to know students as individuals.

Whereas the AACTE group can be described best as taking a more active role in directing the learning of students toward desirable goals and of giving differential emphasis to the learning of the superior student, the education staff group appears to be more concerned with developing relationships which can be useful to most students in freeing them for self-directed learning. The AACTE group reflects a higher level of negative attitudes toward people and things than does the education staff group.

Thus, if it is conceded that the AACTE group, because of its method of selection, represents a group of more outstanding teachers than does the unselected education staff group, then outstanding college teaching is characterized in part by somewhat negative affect, a lessened concern for self-oriented problems, directing students toward teacher-selected concern for all of the students, among other things. The best that is known about human relations and teaching would not tend to support such a conclusion and a more valid conclusion may be that the method of selection of the AACTE participants was not successful in bringing together a group of outstanding teachers.

COMPOSITE OF AACTE SEMINAR PARTICIPANTS

(N=34)

Categories listed in order in which respondents ranked their importance.

Category One

15. Learning new ways to help students develop their maximum potentials.

Category Two

5. Identifying the best that is known about effective teaching and identifying the implications for individual teaching.

75. Helping superior students to work up to the level of their capacity.

Category Three

11. Evaluating effectiveness as a teacher.

16. Becoming the most positive educational influence in the lives of students that is possible.

19. Continuing to develop new and better ways of getting students to participate and enter classwork with fullest attention.

23. Learning better ways of approaching students to help them become increasingly self-directing.

33. Learning newer ways of motivating students.

52. Keeping up to date professionally in a rapidly changing field.

Category Four

8. Learning how to vary instruction to meet individual differences of students.

18. Helping students know how to apply knowledge.

37. How to continue to improve teaching in a fast-changing world.

53. How to remain open to new experience and to use it to continue to grow in effectiveness as a teacher.

56. Difficulty of getting students to do necessary independent reading.

61 How to constantly change curricular practices to adjust to the latest ideas and research findings.

68. Making student-evaluating a meaningful process in terms of learning.

74. Learning better ways to help students see themselves as "professionals".

76. Presenting subject matter in a way that students can get the most out of it.

82. Helping students to see purpose in their work.

83. Inability of students to do critical thinking.

Category Five

1. Getting to know students as individuals.

3. Becoming more effective in helping students want to learn what is important.

13. Effective utilization of time so that each class period contributes to achievement of the course objectives.

14. Diagnosing individual student problems so that the teacher knows how to react and be helpful.

17. Teaching students who are more concerned about grades than their educational development.

30. Finding and budgeting time wisely to do the many professional things which a college teacher would like to do.

31. The rapid tempo of education that causes students to charge through college effectively cheating themselves of becoming educated.

49. Making precise assignments of greatest help to students.

51. Learning how to become a more effective counselor of students.

58. Avoiding some of the calls on time and energy that do not significantly increase professional contributions.

69. Lack of time to do well what is expected.

70. Establishing relationships with students which provide for an optimum learning climate.

77. Teaching students how to read and understand what they have read.

80. Lack of concern of students in developing high standards.

Category Six

26. Helping other members of the staff to examine critical problems.

27. Working with students, many of whom are inclined to be dependent.

28. Helping students overcome their lack of preparation for college work.

34. Finding ways of sharing professional ideas among faculty members.

36. Finding interesting new approaches to old subject matter for new students.

42. Students who lack a sense of responsibility.

45. Keeping abreast of the individual teacher's responsibility in light of the institution's requirements.

54. Students who lack the ability to profit from college work.

57. Student's failure to use proper English.

65. Developing continually spontaneously warm and appreciative responses to students.

67. So many required duties which keep teachers from "their" work.

72. Inadequate library facilities.

73. Lack of communication and planning among departments and within departments necessary to minimize subject matter duplication and to insure desirable course sequences.

78. Obtaining resources to accomplish what seems important to accomplish.

81. Continuing to become more genuine and open with students.

84. Knowing more about what is required in effective job performance and ways to help students achieve this.

Category Seven

9. Students taking courses for which they have no background and low passing ability.

10. Lack of time during a course to cover adequately the content included in the syllabus.

29. Inefficiency and ineptitude of some instructors that make it difficult for those who really want to help the students.

32. Apathy of many teachers to teaching.

35. Heterogenity of interests and preparation of students in advanced courses that makes selection of adequate course content impossible.

38. Lack of set standards for judging progress of students.

39. Not enough uniformity in what is expected of students from different teachers.

40. Helping those in authority to review arbitrary decisions.

43. Lack of cooperation of other teachers and sometimes the administration in solving teaching problems.

46. Lack of scholarly environment.

50. The poor quality of students emerging from high schools.

59. Teaching students who have not been prepared adequately by their previous teachers.

60. Knowing and doing what administrative officers expect and at the same time helping them to examine their expectations.

63. Inability of some students to learn, and the fact that they sometimes retard or slow down the more intelligent ones.

Category Eight

2. Lack of necessary supplies and equipment.

12. Instructors who do not maintain adequate ethical standards.

24. Inequalities of staff loads.

44. Immaturity of today's college students.

47. Administrative leadership which fails to "set teacher's sights."

48. Teaching in a framework which does not permit following self-identified problems of students.

55. Demonstrated lack of willingness of professional staff members to work together in a really cooperative way to develop a unity of purpose and function.

64. Lack of professional attitude on the part of other teachers.

66. Administrators who are more interested in quantity than in quality.

71. Rigidity of some students to the introduction of new teaching methods.

79. Lack of appreciation for the teacher's work in this culture.

Category Nine

4. Achieving professional security in an insecure profession.

6. Having to rely on undependable and inefficient secretarial help.

7. Criticism from other members of the institution.

20. Too much emphasis on sports and the extra-curricular activities.

21. Changing classroom emphasis to avoid the criticism of the public and other teachers that teaching is weak.

25. Faculty members who look only for professional advancement.

Category Ten

22. Students wanting to be on an equal basis with teachers.

62. Students who consistently add and drop classes.

Category Eleven

41. Chronic absenteeism.

COMPOSITE OF STAFF MEMBERS OF COLLEGE OF EDUCATION

(N= 28)

Categories listed in order in which respondents ranked their importance.

Category One

68. Making student evaluation a meaningful process in terms of learning.

Category Two

5. Identifying the best that is known about effective teaching and identifying the implications for individual teachers.

23. Learning better ways of approaching students to help them become increasingly self-directing.

Category Three

3. Becoming more effective in helping students to learn what is important.
11. Evaluating individual effectiveness as a teacher.
15. Learning new ways students develop their maximum potentials through their studies.
16. Becoming the most positive educational influence possible in the lives of the students.
37. How to continue to improve teaching in a fast-changing world.
52. Keeping up to date professionally in a rapidly changing field.

Category Four

1. Getting to know students as individuals.
8. Learning how to vary instruction to meet individual differences of students.
13. Effective utilization of time so that each class period contributes to achievement of course objectives.
19. Continuing to develop new and better ways of getting students to participate with their fullest attention.
30. Finding and budgeting time wisely to do the many professional things which college teachers like to do.
33. Learning newer ways of motivating students.
53. How to remain open to new experience and to use it to continue to grow in effectiveness as a teacher.
70. Establishing relationships with students which provide for an optimum learning climate.
75. Helping superior students to work on the level of their capacity.

76. Presenting the subject matter in a way that students can derive most from it.

82. Helping students to see purpose in their work.

Category Five

14. Diagnosing individual student problems in order to react most helpfully.

18. Helping students on ways to apply knowledge.

34. Finding ways of sharing professional ideas among faculty members.

36. Finding interesting new approaches to old subject matter for new students.

51. Learning how to become a more effective counselor of students.

56. Difficulty of getting students to do as much independent reading as necessary.

58. Avoiding some of the calls on time and energy that do not significantly increase professional contributions.

61. How to constantly change curricular practices to adjust to the latest ideas and research findings.

65. Developing continually spontaneously warm and appreciative responses to students.

69. Lack of time to effectively perform responsibilities.

74. Learning better ways to help students see themselves as "professionals".

81 Continuing to become more genuine and open with students.

83. Inability of students to do critical thinking.

84. Knowing more about requirements for effective job performance and how to help students achieve this.

Category Six

2. Lack of necessary supplies and equipment.
6. Reliance on undependable and inefficient secretarial
17. Teaching students who are more concerned about grades than their educational development.
26. Helping other members of the staff to examine critical problems.
27. Working with students, many of whom are inclined to be dependent.
28. Helping students overcome their lack of preparation for college work.
31. The rapid tempo of education that causes students to charge through college effectively cheating themselves of becoming educated.
49. Making precise assignments of greatest help to students.
57. Student's failure to use proper English.
60. Knowing and doing what administrative officers expect and at the same time helping them to examine their expectations.
67. So many required duties which keep teachers from "their" work.
73. Lack of communication and planning among departments and within departments necessary to minimize subject matter duplication and to insure desirable course sequences.
77. Teaching students how to read and understand what they have read.
78. Obtaining resources to accomplish what seems important.
79. Lack of appreciation of the teacher's work in this

80. Lack of concern of students in developing high standards.

Category Seven

4. Achieving professional security in an insecure profession.

7. Criticism from other members of the institution.

10. Lack of time during a course to cover adequately the content included in the syllabus.

32. Apathy of many teachers to teaching.

35. Heterogenity of interests and preparation of students in advanced courses makes selection of adequate course content impossible.

38. Lack of set standards for judging progress of students.

40. Helping those in authority to review arbitrary decisions.

42. Students who lack a sense of responsibility.

45. Keeping abreast of individual teacher's responsibilities in light of the institution's requirements.

46. Lack of scholarly environment.

48. Teaching in a framework which does not permit the teacher to follow up self-identified problems of students.

54. Students who lack the ability to profit from college work.

55. The demonstrated lack of willingness of members of the professional staff to work together in a really cooperative way to develop a unity of purpose and function.

71. Rigidity of some students to the introduction of new methods of teaching.

Category Eight

9. Students taking courses for which they have no background and low passing ability.

12. Instructors who do not maintain adequate ethical standards.

20. Too much emphasis on sports and extra-curricular activities.

21. Changing classroom emphasis to avoid the criticism of the public and other teachers that our teaching is weak.

25. Faculty members who look only for professional advancement.

39. Not enough uniformity in what is expected of students from different teachers.

43. Lack of cooperation from other teachers and sometimes the administration in solving reaching problems.

44. Immaturity of today's college students.

59. Teaching students who have not been prepared adequately by their previous teachers.

63. Inability of some students to learn, and the fact that they sometimes retard or slow down the more intelligent ones.

64. Lack of professional attitude on the part of other teachers.

Category Nine

24. Inequalities of staff loads.

29. Inefficiency and ineptitude of some instructors that make it difficult for those who really want to help the students.

47. Administrative leadership which fails to "set teachers' sights".

50. The poor quality of students emerging from high schools.

66. Administrators who are more interested in numbers than in quality.

72. Inadequate library facilities.

Category Ten

41. Chronic absenteeism.

62. Students who consistently add and drop classes.

Category Eleven

22. Students wanting to be on equal footing with teachers.

CHAPTER 3

The Improvement of College Teaching

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In this paper presented at the second seminar for the Improvement of College Teaching, Dr. Rice examines factors that contribute to outstanding teaching. He notes how technology may improve college education. At the same time he finds that machines are not enough. They do not replace a good college teacher—they are only useful tools in his hands. He also names other specific factors that may foster or hinder outstanding performance: the instructor's interaction with his pupils and the community; the freshness of his lectures; the commitment to being intellectually alive; the willingness to have his ideas challenged; and the way he makes use of his background, and past experience. "Know thyself" may be a prerequisite for a good college instructor.

Our subject is the improvement of college teaching. No one doubts that it needs improvement, along with all other teaching. Good teachers are a scarce commodity, any place from the kindergarten to the graduate school. It is said, but not proved, that the worst teaching done is in college. I doubt that this is so; but even if the best teaching is done in college, we all know that it still is not good enough. Regardless of what else they value, most institutions place teaching ability at the top of the list of qualities valued in professors. Committees, workshops, conventions address themselves to the subject. I presume that the persons who come to a convention like this one are expected not only to be quality college teachers but to exercise leadership on various campuses in bringing about improvement.

My thesis regarding improvement of college teaching is that a major reason for our slowness in making headway is that most of our energy and resources are spent on our least important problems. This is so because the least important problem is the easiest to deal with. The most difficult is so touchy, controversial, and even frightening that it is easier and safer not even to mention it. Consider the problem of the proper use of technology. Here I think we are doing fairly well. Remarkable energy, brain power, and resources are commonly invested in the creation of a new library, a new gymnasium, a new language laboratory. Light, color, machinery—the whole resources of our modern technology—are wonderfully used in a school plant like the one at bright, new Chicago Teachers College North or at some of the new California institutions. The coming of automatic data processing to the college campus has worked educational miracles. Several thousand freshmen on a single campus can be given an English placement test, and the machine will score the tests at night so that the results will be ready next day. Devices for feedback, the overlay projector, the tape recorder, the opaque projector, closed circuit TV are all available to the college teacher. Films bring the world into his classrooms. I will be surprised if some of you did not leave your lectures on tapes with the departmental secretaries before you left for this conference so that your students are not missing you this morning; they are hearing you on a machine that has such fidelity that the students miss only your visual image. If your institutions can afford a TV tape recorder, you can leave your visual image, too.

One is heartened by the energy, resources, and brains that have gone into technology for teaching and that continue to be invested. As long as a neat little piece of equivocation persists between that part of the taxpaying public which wants quality education and that part which thinks only quantitatively, we may hope for solid support to continue to find ways to use technology to improve teaching. One group will talk about making education more effective, and the other will speak of making it more efficient; and each group will believe that the other is saying the same thing. One will think of a better quality of education for their children, which is effectiveness; the other will think of getting the milk poured into the cans at less cost per can—which is efficiency. Both will see technology as the answer to the problem. This is a grand piece of equivocation by which we are receiving great public support.

Overlay projectors, opaque projectors, tape recorders, sound equipment of many kinds improve both efficiency and effectiveness. All self-respecting institutions have a media center with energetic and imaginative directors and with fleet messengers who carry the tools of technology to every corner of the campus, by foot, cart, or motorcar to reinforce the teacher. And this is only part of it. Newer buildings have movable walls, lighting and air conditioning, sound systems, visual aids unthought of a generation ago. Most English Departments have a model of the Globe Theater. Zoology departments have models of the ear, the eye, the heart—indeed of the entire human body so skillfully put together that one organ can be disconnected at a time and the whole thing taken apart and put back together like a big puzzle.

Granted, everything has not been perfect. Just as one can find an occasional adult layman who does not own nor operate an automobile and just as there are homes without dishwashers, so one can find a teacher who cannot operate an overlay projector and who is all thumbs with a movie projector. Some of us are even afraid of technology, fearing that machines will replace us. It hurts our feelings because machines can teach some things better than we can. We fear technological unemployment just as do mill workers. Those men down in California at the Educational Facilities Laboratories, said to be thinking up a process for automated student counseling whereby a student will be able to go into a booth; turn the button to vocational counseling, college counseling, personal counseling; and then talk to and get answers from a person on a screen, are not winning friends among guidance and counseling people on the campuses. If I have taken twenty years to work my way up in an English Department so that I now have the Shakespeare course, I become red eyed at the plan of the institution to buy a complete course in film capsules and tape which brings Frank Baxter or some such person to teach the course and makes it possible to assign me an additional Freshman English course or reduces me to conducting quiz sessions, monitoring tests, and running the projection machine. The taxpaper may want this, but I don't.

The reactionaries will die off in time, however. These are only a few little dark clouds in the beautiful sky of our technological world. On the whole, technology has been a whale of a success in improving college teaching.

With satisfaction in a job being well done, let us turn to a second problem—teaching technique. This is a matter of organization, management, administration. Here again, great strides forward have been taken in the last one or two decades. Money, released time, resources of many kinds are going into it.

The Ford Foundation is spending millions of dollars over the country in places like New York, Michigan, Oregon for improving teaching. Much of it goes into technology, but I would guess that an equal amount goes into finding and developing better teaching techniques.

Team teaching is a very big thing these days, although we in college are behind our brothers in the secondary schools in capitalizing on its possibilities. Life magazine recently ran an article on a high school in Massachusetts given over entirely to team teaching and showing it as a cure for the old ills of student boredom, drop-outs, student failures, individual differences, and rapid teacher turnover. Persons with less intellectual shoddiness than this magazine will not expect team teaching to solve so many problems, but the teachniqe could do a great deal to improve college teaching.

Flexible scheduling is another technique. Why should nearly every class be fifty minutes long, and why must a three-hour class meet for three fifty-minute periods on Monday, Wednesday, and Friday? Alert departments are developing techniques of scheduling which I, for one, had not even thought of five years ago.

In teacher preparation the big technique these days is the internship. Perhaps the traditional practice-teaching course will die out in the coming years, or perhaps some other technique will be developed. Every alert school is experimenting with new techniques—techniques for selecting and screening students, for evaluating, for teaching. Persons from all around are coming to Oregon to see how we are doing things. We in turn are visiting Michigan, California, Illinois, Massachusetts, New York. If an institution is trying a new technique these days, the educational world will beat a path to its door to see what is being done and how it is working.

To the ordinary citizen, the word integration calls up images of brave colored children going to schools once all white and courageous colored people challenging segregation in restaurants and theaters. But in education it means the breakdown of rigid old departmental lines as a technique for improving college teaching. English, speech, journalism blend at last. Education is integrating with everything on the campus. A profession once splintered into little segments and made up of pieces of things from here and there is now integrating. Psychology and educational psychology come back together. Why did they ever get separated? Philosophy and educational philosophy blend. History of education goes back to history, where it belongs. Educational sociology belongs to sociology. Method and content, once sharply divided, come together. Honors programs, every respectable institution has one, bring together literature and history, and they offer courses in science, rather than separate courses in physics, chemistry, zoology, botany.

I went to college in the bad old days when departments were enemies, when an English teacher looked down on a speech teacher and a speech teacher looked down on a shorthand teacher. The student who changed his major committed an act of treason. The student who anticipated the recommendations of his department was expected to express the hatreds for other disciplines shared by the professors in his own discipline. I quickly learned as an English major that I was expected to hate speech most, education next, and applied science next. I was permitted to like history, physical science, and psychology—but not educational psychology.

Now all this has passed, or softened at least, in the new day when everybody is integrating. A few holdouts for white supremacy in the physical science departments speak darkly of mongrelization in the Honors Programs. But they won't stem the tide. Integration is a part of the new technique.

Through technique great improvements have been made in a single generation. My first year of college French consisted of learning gramatical rules, memorizing vocabulary lists, and reading short sentences that illustrated the grammatical rules. Today no alert foreign language teacher would limit himself to such techniques. It shames me to describe the way I taught Freshman English a generation ago. In the first quarter I taught seventh and eighth grade grammar which the students' junior and senior high school teachers had covered but not taught. I used a workbook! In the second quarter I taught punctuation and mechanics, using the workbook again. What a difference there is between this course and a well-taught Freshman English course today with its attention to rhetoric and language and its emphasis on writing.

And then there was my freshman mathematics—but I won't go on. Splendid things have occurred, are occurring, will occur in the improvement of college teaching because attention is paid to the problem of technique, a problem in method, organization, administration, management.

At this point one might hear a variation upon the cynical remark: "If you're so darned smart, why aren't you rich?" If we have made all this improvement, why aren't we doing better?

We are not rich, not doing better, because of our most difficult problem. I read the papers you sent in for this conference and was pleased to see that most of you did not confine yourselves to technology and technique. Our major problem is a matter of intelligence and character. The quality of college teaching is based on these two commodities far more than upon anything else. Of course this is also true of politics, religion, and the family. At bottom our problem is a matter of the mind and the heart—it is a matter of ethics and knowledge.

How do we deal with this problem—identify it, define it, even admit it?

Some of the most destructive elements of this problem are a part of the larger community in which we work—elements against which we seem able to make only glacial progress. Intelligent and ethical teachers wish to work in a community where justice, understanding, and respect for knowledge are evident. They are repelled by a community which humiliates them, exploits them—where excessive conformity and servile flattery are demanded; where narrow-visioned, security-seeking manipulators are in charge; where bitter struggles among economic, racial, and religious groups promote attempts to use institutions, including the schools, as weapons to gain non-educational ends.

The cost to human intellect and character in such settings is terrible. The sensitive, "human person is overwhelmed. College teachers are not always able or willing to struggle against the tide in an environment where even the paintings must receive political approval. It is said of our profession that many of us are nomads. Perhaps this is true, but many of the hundreds of college teachers moving about among institutions are not looking simply for a better salary and professional advancement. Many are in quest of a professional environment and a community where intelligence, decency, and trust are more in evidence than ignorance, arrogance, and distrust.

These faults in the larger community are easy to see. It is a little harder to see the threats to intelligence of our own making. A threat is evident in the following pattern. Out of considerable study, research, thought, and sharpening of knowledge emerges a well-prepared lecture. It is recorded after a fashion in notes. A quarter or a year later these notes are picked out of the file ten minutes before class so that the lecture can be repeated. This may happen sixteen times in sixteen years. The research, reading, study of the first preparation are never repeated, because the teacher lacks energy, or time, or motivation, or perhaps even because he has come to think of the notes as the lecture. It is a little as if a musician were to give a concert after weeks of concentration and practice and then lay aside his instrument for a year and expect to repeat the concert a year hence just by looking at the score. We have a great advantage over the minister who preaches a sermon each Sunday. Our congregation rotates from quarter to quarter. If the minister repeated his sermon each quarter from notes and if the sermon were a little worse, a little less fresh, each time he repeated it, he would lose his congregation, since they do not turn over each quarter and since they do not have to come in order to earn college credit to get a degree.

I have described only one form of a process that threatens the intellectual life of a college teacher. I admit that I personally have been a victim of it. I also admit that it would be a tremendously energetic person who could prepare twelve new lectures a week. But to prepare less than three, I think, is to put one's intellectual life in danger.

Still another pattern that threatens us is as follows. At some time, perhaps early in our teaching, we get zeroed in on the college student. We know his needs, interests, fears, ambitions, angers, and loves. Knowing these things, we develop the ability of addressing ourselves to him. A decade passes, two decades. We are still talking to the same student, but he isn't there anymore. We are vaguely disturbed by the seeming boredom of the student before us and are likely to blame him for his lack of intellectual curiosity. What we have to say interested his father, but the son lives in a different world. I began teaching in college when most of my students were rural and worried about Hitler and the depression. Many of the materials of my courses used then were utterly useless to interest an urban student in Providence, Rhode Island, where I taught in this decade.

It is a remarkable thing to which we commit ourselves when we become college teachers—the commitment to remain intellectually alive at least until we reach retirement. It is like committing oneself to love through sickness and health, poverty and prosperity. To stay intellectually alive is an exhausting task. But a teacher not engaged in research can hardly expect to guide students in research. A teacher not pushing out into new intellectual interests but simply going over and over a set of lessons and assignments will not awaken his students intellectually. Not knowing how to run a projection machine or prepare overlays and not using the latest proved techniques are trivial faults compared with the intellectual fault of coasting.

If a young faculty member fresh from his Ph.D. should ask me for advice, I would tell him to take definite steps to guard his intellectual life from numerous factors that will slowly erode it by dissipating his energy and eating up countless hours best spent in laboratory, library, or classroom. Hundreds of hours are wasted each week in committee-ridden institutions in which large groups meet to decide through the democratic process whether paper or pencils are to be bought with the supply money or whether one general education course is to be substituted for another in a given student's program. Excessive talk in office, halls, coffee shops takes its toll. Naps at noon, tending the baby in the afternoon while the wife is at club, community service, skiing, gardening, adding a basement room, club membership, and a thousand other worthy and pleasant things can eat up one's non-teaching time and if overdone slowly destroy his intellectual power by keeping him from reading, research, expanding his knowledge of his own discipline, and other activities by which he may preserve and strengthen his intellect for teaching. Knowledge, I believe it was Whitehead who said it, is like fish: it doesn't keep.

In one way at least the classroom itself threatens us, peopled as it is continually by persons who may often be brighter than we are but whose greenness keeps them from being a match for us. And even if they could match us, the classroom is structured in such a way that we are the judges, not the judged. It is a courageous student who dares try to reverse roles with us. Consequently, we need to be examined and checked by our peers. A person who gets himself into a position where no one can question him is in danger. The following is precisely what is wrong with many older people, including some college professors: they have worked their way into positions in which no one can tell them that they are wrong. Unfortunately many situations in life are such that rank and position determine rightness, not reason and facts. A vicious kind of erosion often sets in with the person who is always right, to whom no one can say, "You have only half the story" or "Your thinking is shoddy." Some older people need nothing so much as to be told to go to hell.

Consider the position in which we find ourselfes—many of us—year after year: only the undergraduate—immature, new in our field, and also seeking a grade—is in a position to test us. This condition is, I think, a major justification for publishing. Not all of us can publish, unfortunately, but those of us who do not should seek other means of testing our ideas with our peers and superiors. I would justify team teaching on this score.

I have left the subject of character to the end, a subject upon which it is very difficult for me to get above the level of a platitude. I do, however, have an idea about it which I would like to test before my peers.

I am told, and my experience confirms it, that there are certain basic emotional sets, certain powerful biases in the human character, certain ways of looking at things, certain slants that each human being carries because of his own early inheritance. We all bear the conditioning of our early economic, racial, national, religious, and family experience. Here lie our major strengths and limitations of character. We won't make adequate improvement in ourselves as college teachers until we look fairly objectively into the milieu from which we come.

For illustration, let us look into the milieu out of which, it is said, our colleagues come who teach in the elementary and secondary schools—the so-called lower middle class. They are sons of farmers who for some reason could not or would not remain on the farm. They are people whose parents scraped together enough money to secure an inexpensive college education for one or two of their children. They lacked the status of people who live in the neighborhoods where one must pass a gateman to get in; where the doings of one's wife get into the society section; where one's daughter is a debutante and "comes out" in a big party when she is eighteen; where a club membership, trips to Europe, an established business are common. The families of public school teachers generally lacked these things, but they had aspirations. In our society the three chief means of social mobility upward are education, money, and marriage. Only good luck or craft is likely to result in a marriage that lifts one out of his class. Money is very hard to come by. Education is the chief means of mobility.

Lest I appear to belittle, let me say at once that a limiting background is not something that some people have and some do not. What I shall try to develop is the idea that one's basic problem of character is to use his background as an asset, not as a thing that cripples. The daughter of a poor Arkansas farmer or a Boston hairdresser or a San Francisco policeman can use her background to good advantage as a teacher. The daughter of the debtuante class, if she should become a teacher, might use hers to precipitate failure. It depends upon how much vanity, hostility, frustration, bias she carries with her into the classroom, whether she is ashamed, or arrogant, overly proud, or rebellious because of her roots.

Now what about us college teachers? Who are we? What scars do we bear? What biases, what blindness, what frustration and hostility are characteristic of us? What milieu did we come from? I have no survey by which to answer my question. Until one is made or until some sociologist friend calls my attention to one I shall have to rely upon the method Satan used to get his information—"by going to and fro upon the earth and walking up and down upon it."

A great many of us were produced out of the same milieu as were public school teachers. Excessive conformity, manners as a means of securing status, envy and hostility toward the well-to-do, excessive security-seeking endanger us as they do our colleagues in the elementary and high schools. We need not think that doctoral degrees can prevent us from being identified with these people or that our moral problems are significantly different from theirs.

A significant number of college professors are sons of clergymen and missionaries who believed in advanced education. Education often cost the sons their fathers' religious orthodoxy, but as college teachers the sons continued their fathers' dedication to service, separation from the "world," and business incompetence. Or if the sons rebelled in ways that minister's sons sometimes do, they may be carrying an unending war against their fathers in their classrooms through continual ridicule of religion, Puritanism, and the theological approach to life.

Let us shift for a moment to the possible moral problem of the person of a minority race who becomes a professor. Let us, for example, suppose him as a poor immigrant boy or son of poor immigrants in Brooklyn. He is Jewish. His teachers are Christian. They attempt to Americanize him by extolling the glories of America—land of freedom, religious toleration, economic opportunity, separation of church and state, and many other glorious things, including a melting pot. He sees nothing in them which would make him wish to melt and reform himself in their image. All around him in Brooklyn he sees the reverse of religious toleration, freedom of economic opportunity. Many offenses worse to his Jewish sensibility than the Christmas pageant and the creche of the Holy Family in the halls of the school, expose as simple-mindedness or hypocrisy the assertions regarding separation of church and state. Through great energy, sacrifice, and concentration he later secures a doctoral degree from Columbia University and becomes a college professor. What remains with him from that early childhood experience in Brooklyn either to strengthen him or cripple him as a teacher? For a moment, let us look at the son of a Georgia Negro doctor who earns his doctorate at the University of Chicago. After a stint at Howard, where he does not secure tenure, he takes a position at a small college where a University of Chicago Ph.D. looks splendid in the catalog. What will be his moral problem? Will he carry a hatred for all authority, an impulse to categorize certain people as enemies? Will he be guilty of thoughtless dislike for the establishment, automatic identification with the underdog?

I hope that my point is clear; if it is not valid I would like to be corrected. What I am saying is that the root problem of character in a teacher is how he uses the source that created him and is ingrained in his makeup as a human being. The Negro teacher from Georgia may have insight and humanity as a result of his background, and he may not. The Brooklyn Jew may bring cultural depth, sanity, and compassion to the classroom; and he may also be so fiercely proud, so defensive, and so hostile that he cannot operate without browbeating everyone who comes near him. A person whose roots go back to middle class poverty may use his background as a source of energy and insight; or he may carry the irrational hostilities, prejudice, and habits of his class into his teaching. Consider the skinny boy who was beaten up by the physically aggressive kids, who was always picked last when the boys chose up for a game, and who found refuge in books, music lessons, and pleasing the teacher. Good grades compensated for not making the team. He finally ended up as a college professor, where he made war on muscular people through continual attack on varsity athletes and the Physical Education Department. I shall not comment on the muscular, well-coordinated boy who hated the bookish teacher's pet because of humilitation in the classroom and who moved from varsity athlete, to college coach, to director of athletics and found himself a colleague with this flat-chested, bookish, introverted egghead. The poor Irish boy designated by his mother to be a priest and a scholar and who as an altar boy learned anything but love for the priestly profession and so became a scholar only may use his background as a source of insight and energy in the classroom or he may carry on a continual struggle with his mother through ridicule of clerical people and superstition. I was reared in an excessively puritanical atmosphere in which the 'Gospel of Hard Work' was the basis of life, in which an idle man deserved only contempt, and in which the good people were the people who worked very long and very hard. I still feel my old puritan indignations arise when I discover a college professor who golfs in the afternoon, but when I do, I remind myself that the values I inherited are only one of a number of alternatives.

Since every teacher must carry with him his own inheritance, or since each of us is stuck with himself, our chief problem of character, as I see it, is to use that background as something to strengthen us and not to weaken—as a source of vitality that helps make us unique by setting us off from a thousand other teachers who teach the same subjects as we do and as a thing that makes us interesting to our students and worthy of their attention as human beings.

What I have tried to say is that technology, technique, intelligence, and character are all factors with which we must deal. I have certainly not intended to belittle technology or technique. Technology will help us to be both efficient and effective. Teachers do fail because of poor technique; it does not need any less emphasis. What I do complain about is insufficient attention to intelligence and character, although perhaps they are ignored not because we do not know that they are important but because they are so difficult to deal with. Most difficult, I think, is the moral problem, the problem of character. We are human beings, not sterile test tubes. As human beings, we have our sub-rational selves in which are rooted our highest loyalties, our deepest fears and hostilities, our chief source of either success or failure. Each of us is stuck with himself. The difficult task is to use oneself to good advantage in the college classroom.

CHAPTER 4

Teachers' Statements on Seminar Topics

Topics appear in the order of importance
in which they were listed by the teachers.

The college instructors at the Louisville Conference and the Portland Seminar focused their attention on the following eight topics:

1. Use of Techniques and Resources
2. Selection of Objectives
3. Maintaining Professional Competence
4. Evaluation Procedures
5. Areas for Personal Improvement
6. Relations with Students
7. Organization of Subject Matter
8. Cooperative Relations with Colleagues.

Although the participants mentioned all the above topics (Many of them are inter-related), they paid the most attention to Use of Techniques and Resources and least attention to Cooperative Relations with Colleagues. Between these extremes, in descending order of importance, they listed: Selection of Objectives; Maintaining Professional Competence; Evaluation Procedures; Areas for Personal Improvement; Relations with Students; and Organization of Subject Matter.

These eight topics constitute the subdivisions of this chapter. The quotations represent factors considered necessary for good teaching by the participating college instructors.

Use of Techniques and Resources

George H. Stewart, Assistant Professor of Chemistry, Gonzaga University, Spokane, Washington. The eccentricities of college professors forms a part of our lore. While idiosyncrasies provide a basis for good-natured humor, students contrast these human foibles with the perfection of a man's erudition. Without the contrast, the lore lacks meaning. The meaning lies not in the human eccentricity but in the indelible image of erudition a professor has cast on a student's mind.

The professor has become presently a world traveler, consultant, diplomat, and television personality. He seeks what is widely felt to be the high prize of the teaching profession—no teaching. Recent surveys of the influence of federal funds on higher education accent the decreasing number of hours spent by faculty in undergraduate teaching. We have come, as Jacques Barzun has observed, to a point where scholars apparently do not want disciples. In what way am I effective as a teacher? I must lecture to give expression to the excitement I feel, to capture the imagination of students, to bring them singly to inquire and be counseled. Singly, as individuals, I can take their measure, challenge them, and admonish them to go and work. One may increase efficiency in instruction with graduate assistants, television, and programmed courses, but we should not deny teachers that most effective teaching situation—personal contact with individual students.

Christian D. Stevens, Assistant Professor of English Literature, College of Great Falls, Great Falls, Montana. There is a strong tendency toward methodology as a cult in American higher education. A method is open to all, and there is a great deal to be said in a democracy for a collection of rules that makes available to everyone the essentials and joys of learning. But the dilemma arises when the collectors of rules develop a tendency to replace the habit of learning with method. The sole purpose of the speculative order of the mind is destroyed. I believe that educators often fail to see that various rules are without value unless the teacher himself has developed this habit uoon which to base them. The habit of learning is a spiritual force that elevates the teacher above obstacles. And then a remarkable thing happens. Methods appear valuable—personally essential—to the art of teaching, and rules may even form for the individual a code which he applies in or out of the classroom. Socrates, after all, utilized a method in his dialogue. Yet we have only to examine the incapacity of some of his fellow Athenians to employ the dialogue to see the failure of that method without the involvement of a deeper and more basic element: the philosophical habit of learning itself. Thus I believe that the teacher too often resorts to methods and rules as a substitution for speculation. He does not perceive that speculation is the primary force for action. Perhaps because of pressure within our society, perhaps because of the adolescence of our culture, the methodologist is more concerned with the action itself than with the understanding of self-evident truths upon which all our knowledge depends. Understanding, plus the demonstration of the causes of self-evident truths, plus the contemplation of such causes—these are the virtues of speculation. These are the things that make up a philosophical habit of learning. These are the virtues of the mind that I fear the advocates of pure methodology have avoided. I believe they have done so not because of laziness or insincerity, but because of what I should like to call the fallacy of omniscience —the illogical conclusion that they have successfully speculated upon the basis truths of life and their causes and may presume to forget them.

Roy G. Bigelow, Professor of Secondary Education, University of Southern Mississippi, Hattiesburg. The writer has favored the discussion method, with students carrying the load. Prepared study sheets carrying the text assignment as well as that of other references, and the suggested questions and problems, mimeographed and handed out in advance, have been found effective. A brief introductory statement before a new unit or topic is taken up has usually sufficed to introduce the new unit. The students are instructed to prepare notes for class use based on the study sheets. Care is taken to distribute questions through the entire class, thus avoiding favoritism or overlooking the quiet and reserved student who does not readily volunteer. Unannounced quizzes based on one or more of the study exercises have been used from time to time to emphasize the importance of preparation and to motivate learning.

Raymond E. Schultz, Professor of Junior College Education, The Florida State University, Tallahassee. Each student is given a copy of a course plan at the time of the first class period. Students are entitled to know what a course will include, what they must do to accomplish the course objectives, the types of evidence on which their grades will be based, and the weight given each type of evidence in arriving at the final course grade. Doing this serves several purposes. In the case of elective courses, it enables a student to determine whether his time in the course will be well spent. More important, it gives the course focus and helps students to expend their time and energies in ways that will contribute most to accomplishing the course objectives.

Charles L. Hayes, Professor of Education and Psychology, Agricultural and Technical College of North Carolina, Greensboro. We have used a number of predetermined lessons wherein the individual student is allowed to determine the pace at which he thinks he will be able to move in the course. These lessons were outlined and explained to the student. Reference materials and specified readings were all given to the student for each of the lessons. The student could do his reading at his own rate and could ask for a lesson at any time he so desired. If the student passed the lesson evaluation with a score of 70 or better, he had satisfactorily met the requirements for that particular section. If he scored below 70, he was allowed to do some restudying, and could take the test or the evaluation of the lesson at a later date. However, he was not permitted to pursue a more advanced lesson until he had passed successfully the preceding lesson evaluation. There were a total of nine lessons in the outline and the student was told that if he passed 8 of these with a score of 70 or better he would get an A; if he passed 7, a B; 6, a C; anything below 6, D. One may question whether or not it was an adequate technique of teaching. One thing I can say is that it did enable the student to broaden his scope in reading because he had to do the reading in order to do a good job on the lesson evaluation.

John B. Chase, Jr., Associate Professor of Science Education, University of North Carolina, Chapel Hill. The college teacher assumes the responsibility of creating a physical environment conducive to problem solving experiences. Ample space appropriately arranged for individual work and presentations is needed. References, bulletins, statistical data, and charts are necessary for preliminary research. For science methods, laboratory facilities and equipment are used. The physical attractiveness of facilities and the psychological tone of intellectual freedom set by the instructor are imperative for free discussion and early participation by the student. This environment must be pre-planned and arranged before formal work begins.

Mary Tom Berry, Assistant Professor of Elementary Education, Middle Tennessee State College, Murfreesboro. Attention is given to the physical appearance of the classroom. An attempt is made to keep the room light, well ventilated, and reasonably orderly. The chairs are placed in a circular formation. Such an arrangement permits me to sit in the circle with the students, when classes are not too large. Before beginning the lesson, a moment of informal conversation with the students brings attention pleasantly and provides an opportunity for moving into the lesson in a somewhat relaxed manner. This practice also directly affects the teacher-student relationship.

James S. Hart, Associate Professor of English, Portland State College, Portland, Oregon. The indispensible training-ground for the mastery of large class lecture problems is the theater; the personal disciplines that participation in theatrical performance imposes on the actor are so very nearly those which confront the lecturer in his communication to the pupil that there is merit in re-examining the relationship between these skills: between those demanded of the stage and those demanded on the platform. What are notes if they are not so many "lines" to be learned, unless the lecturer is to fall into the fatal trap of merely reading. Even more on television than in the classroom, where, after all, one may pause to correct, to modify, to qualify, the teacher is dependent for adequate delivery on some measure of memorization. Indeed, in both situations, screen and classroom, one of the chief desiderata is the appearance of spontaneity; not because one wishes to deceive the student, but because one wishes earnestly to interest him, to command his mind-stretching attention, and it is demonstrable that if spontaneity will not guarantee this level of attention, its absence may well induce somnolence. And the appearance of spontaneity becomes possible for most of us only after ee have committed to memory the shape of our argument: that is, its major points and their connective tissue.

Herbert C. Taylor, Professor of Anthropology, Western Washington State College, Bellingham. The alternatives to the large lecture section make the cure less appealing than the disease. Many institutions, particularly large universities blessed with an abundant supply of graduate labor, subject their freshman students to instruction by inexperienced student teachers. I have never heard anyone even attempt to defend the proposition that five 30-student sections taught by five inexperienced graduate assistants were better than one 150-student audience receiving lectures from one outstanding professor. The only other solutions advocated are simply hiring enough faculty to teach small introductory sections and the use of audio-visual aids to teach the introductory sections.

It became apparent that it was necessary to find and/or develop a special breed—college professors who could handle the large lecture sections. The easiest solution seemed to be to employ individuals recommended as good lecturers. This solution proved illusory because of a peculiar evaluative method and semantic process inherent in American graduate faculties—namely, the fixed view that if an individual cannot do research, then he is good for naught but teaching; and, anyone who gets a Ph.D. or a terminal M.A. from a graduate school and is believed by his faculty to possess no research potential, receives the secondary accolade of "promising teacher." In the overwhelming majority of instances, the recommender does not see his graduate student in action in the classroom. His statement, therefore, that "while not one of our researchers, Dr. Smith should prove to be an outstanding teacher" usually represents a pious hope rather than an empirically demonstrated actuality.

Recently we set out to attempt to determine what makes a good introductory lecturer, an extremely difficult area to measure. As an opening step, the president, senior faculty members in administrative positions, sophomores, and graduating seniors were asked to name the outstanding teachers on the faculty. Of the top five on each list, two were common to all. Thus there was surprising unamimity among present senior faculty, senior students and beginning sophomores as to the outstanding teachers. We then set out to find what characteristics these individuals had in common. When we turned to research and creative activities an immediate relationship appeared. All four had published within the preceding year. In terms of frequency of publication, the four were easily in the top ten of the college.

Charles J. Flora, Associate Professor of Marine Biology, Western Washington State College, Bellingham. I have found it helpful to destroy all my lecture notes every second cycle in a given course.

Frank B. May, Elementary Education, Washington State University, Pullman. Let me emphasize my affection for effort and emotion as vital components of the learning situation. I am speaking not only of quantity but also of quality of effort and emotion. It may take great effort to listen to some lecturers and to take abundant notes, but the quality of the effort is diminished by the lack of cerebral mobility experienced by the students. Students who are required to read 5,000 pages for a course may also experience strong emotions. My reason for arguing for emotion at all is that it seems to be a necessary catalyst for changing behavior. Therefore, if we want such change to take place, we, as teachers, should be concerned with both the quality and quantity of emotional impact which our courses provide. The experiences which we cause students to encounter and the effort we cause them to expend are both vital ingredients of that emotional impact. Of course, students learn not only by experience, but also by example. On those days that I turn the limelight on myself rather than the students, I try to teach my students as I would want them to teach children.

Roscoe H. Playforth, Associate Professor of Sociology, Morehead State College, Morehead, Kentucky. Enthusiasm is a technique. A friend once said to me, "If you would have others paint their fences white, paint yours white." It is important to be enthusiastic about the task at hand. It causes a constant lookout for better ways to improve effectiveness as an instructor. This enthusiasm is important also as a motivating influence.

Communication is a technique. The uniqueness of a self-concept may be a bar to effective communication. This is because a self-concept tends to rigidity under threat, real or imaginary. Once this rigidity sets in, strange reactions to perception and thought patterns begin to develop. Psychologist Carl Rogers says that one may avoid this situation of communication deadlock by the application of a technique which he describes as "non-evaluative listening." I attempt to set the stage for this process by providing a conversational atmosphere in the classroom. This removes from the student the psychological necessity of countering the instructor's presentations since it provides avenues through which minute concept tones and colors which clash may be dissipated, short of frustration, and thus be removed to prevent communication deadlocks.

Social drama is a useful technique. After the problem is stated, groups of students are assigned as actors. If this is a new technique for the class, great care should be used in the selection of the initiating group of actors. In the absence of the actors, the class discusses the problem and arrives at possible solutions. The actors rejoin the class and act extemporaneously. The aim of this technique may be merely to present opposite views. The students often identify with roles played and learn how it feels to be "in someone else's shoes."

Buzz session is a technique. The instructor gives some orientation to the students through a brief presentation of the problem. Next the students are grouped very informally for a period to analyze the problem. A recorder is named who reports to the class at the end of the buzz session.

J. Donald Hawk, Professor of Education, Tift College, Forsyth, Georgia. An average of one film each week is used in each course. Film orders are worked out within the department to insure that no student will see the same film again within at least a year. Films are chosen for their content, the contribution they can make to understanding and their relatedness to the material in texts. These films are previewed and student-led discussions follow each film.

Harold F. Burhans, Assistant Professor of Business Administration, High Point College, High Point, North Carolina. Recent years have witnessed an increased use of visual materials as an aid to effective instruction. This method requires preliminary preparation by the teacher for best results. Following the use of these materials, class discussion should take place on the application of the material to the subject under discussion. Unless this is done it is doubtful whether or not we can justify the time spent with them.

Jack Ashley, Associate Professor of English Literature, Troy State College, Troy, Alabama. The chief technique which I have found to be of value is that of lecture. By this means the pertinent and objective facts may be conveyed in addition to subjective interpretations. Lecture technique does not exclude, however, the use of classroom discussion: questions, disputations, and interpretations from the students. Another method which I have found to be of great use is that of oral and dramatic interpretations. In courses dealing with poetry and drama I have found this means to be preferable to that of paraphrasing. I have found in my own situation that audio-visual resources are often both irrelevant and time-consuming and that students are most profoundly stimulated by an awareness of the printed page itself. I make scant use of recordings and films. I do encourage the use of the library and give frequent bibliographical references. I have found that communication of outstanding interpretations presented in the lectures provides stimulation for further research; in teaching Hamlet I refer to at least six of the outstanding interpretations of the play. Finally, I attempt to show the correlation between literature as a discipline and other academic areas. The most obvious

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inter-relation is that of literature and philosophy. A cursory summary of any technical philosophy underlying a literary work has proved stimulating and enlightening to students.

John F. Wilhelm, Professor of English and Humanities, Sacramento State College, Sacramento, California. I believe that the same creative impulse is at the locus of all creative effort whether literary or graphic, and that teaching students what constitutes a piece of imaginative literature can be achieved with reasonable effectiveness by bringing to the student a variety of experiences in the form of paintings intended to illustrate these differences. I usually begin the course with a series of landscape paintings that can be contrasted with photographs of the exact scene. Many of Cezanne's landscapes have had their scenes photographed. His "Alley of Chestnut Trees" and "Well and Grinding Wheel in the Forest," when compared with the photographs of the exact scenes clearly illustrate how Cezanne eliminated extraneous details and rearranged rocks, trees and background in order to bring out the natural forms of the trees and background, in the same way that a piece of well-developed and carefully composed fiction. After four or five meetings the class should be ready for a short written assignment in which they are asked to apply the same principle to a poem or short story. A good transitional assignment is to have the class read Wordsworth's "I Wandered Lonely as a Cloud" and a description of "daffodil" in an encyclopedia or standard reference work on botany.

A more difficult and demanding assignment coming at an appropriate stage of the course would be to have the class read Stephen Crane's short story, "The Open Boat," and the press accounts of the sinking of the steamship Commodore, along with Crane's own report to the press. The chief value to the student is considerable because up to this point in his career his study of fiction has most likely been chiefly concerned with remembering details of plot and the names of characters, but now he is forced to think in a new way about literature. The instructor should help the class see that the purpose of the story is to help us broaden experience by allowing imaginative participation while the purpose of the newspaper account is to tell us about the experiences.

Rev. William N. Bischoff, S.J., Professor of History, Gonzaga University, Spokane, Washington. My most effective technique for assisting students improve their written expression is by pre-correcting all major themes. Experience shows that a quarter of a class may accept this invitation to have work examined before it is due. Time spent with truly interested students is not wasted. Pre-correcting themes encourages the best, not necessarily the brightest, students to write their papers early, pay attention to the tutorial explanation of corrections, and re-do the theme... before finally submitting it. New mistakes may appear in subsequent work, but seldo errors indicated in pre-correction recur. A similar claim may not be made for themes conventionally corrected and traditionally ignored by students.

Sister M. Theodora Breighner, Associate Professor of Mathematics, Ursuline College, Louisville, Kentucky. Teaching must start at the lowest level, that is at the physical or operational level, where examples and models abound. All the senses must be brought into play until the mind of the student begins to generalize. In this stage he puts into words something of what the mind perceives; motivated by these insights he moves into the semiabstract level. Here words replace concrete ideas. Finally the student is able to abstract to the general formula and becomes an inventor along with the mathematician whose works he is studying. Studying a work from the original, before too much editing has been done, is very good for this approach; another good approach is comparing various mathematicians as they begin from different assumptions on which they base their logical thinking and proceed to the same conclusions in regard to a general principle. Both of the above-mentioned procedures lead to a critical and creative approach to learning that is absolutely necessary. Another method to reach the same goal is to make each student responsible for the development, proof, and contingent problems and questions that may arise in regard to a principle. I remain a bystander except for the introduction of a leading question now and then. This greatly helps to sharpen the student's wits, since his fellow students do not spare him. He also learns that quoting an author is not sufficient; he must produce the proof. Books, physical models, and drawings are our principal resources.

Cleburne H. Gilliland, Associate Professor of Elementary Education, Eastern Montana College of Education, Billings. Many students find it difficult to visualize the practical application of many of the theories discussed in education and psychology classes because of lack of background in working with or observing children. Perhaps the ideal solution to this problem would be frequent observations of elementary or secondary school classes in which the teachers use the methods most recently discussed. However, the amount of classroom observation or of participation in actual teaching of children which can be offered is limited. Also, it is not usually possible to observe particular teaching techniques at the time when this observation would be most valuable. Available observation and participation can be supplemented and in some cases replaced by the use of slides and tape recordings of local school situations. Local teachers have been very willing to allow me to come into their classrooms and record procedures which might prove valuable in relation to a particular course. I usually bring my tape recorder and camera into the classroom two days before the actual recording. By the third day the pupils are accustomed to the procedure, and we have a normal classroom situation, which I photograph and record. Later, when my college class is discussing a particular problem or procedure (for example, developing with children the rules for determining when to use the long vowel sound in reading), I can run the tape and at the same time show the slides of the elementary classroom in which the teacher was working with this problem.

The classroom situations shown are usually more like those the students are likely to meet than those shown in most commercial films, and the slides can be more readily adapted to meet the needs of a particular course. The new high-speed films make it possible to take pictures in any classroom with an ordinary 35 mm. camera using available light, which means that the photography causes very little distraction to the pupils.

Slides have several advantages over motion pictures. They are made more easily, edited, and rearranged more easily, and are more versatile in their use in the classroom. Also, the cost is only a small fraction of the cost of motion picture photography. Any type of tape recorder can be used, but the small battery-powered transistor recorder is best because it does not require elaborate preparations which divert the attention of pupils. After the recording, it is best to type a transcript from the tape so that the slides can be more easily arranged to correlate with the sound. This also simplified the selection of those portions of the tape which will be useful for specific purposes.

John McGechaen, Professor of Education, University of British Columbia, Vancouver. In 1956, it became apparent that large enrollment posed two problems new to teacher education in our province. The first and most immediate was that of maintaining close contact with students; the second, that of providing new staff to care for the increased enrollment. To offset this the Dean instituted the "seminar" system whereby each staff member is made responsible for a group of students. They meet at least once a week to discuss problems that arise in practice teaching and in course work. During the term, the advisor is expected to follow the progress of each student and to counsel and guide him whenever needed.

The system has worked extremely well. The friendliness and informality developed in the seminar have transferred to the classroom. In my own case, students regard me as a friend and fellow teacher and not simply as a textbook wired for sound. In class they do not hesitate to ask pointed questions about my methods of teaching, and, although in the ensuing discussion they may be critical they are constructive and, consequently, helpful to me. Frequently other members of staff are invited to the "seminar" to deal with topics or problems within their specialties. At such times everyone profits: the students because they receive expert advice, the visitor because he meets students he might otherwise not meet, and the seminar advisor because he sees a colleague in action.

Grace Graham, Associate Professor of Education, University of Oregon, Eugene. In my classes I create opportunities for students to suggest implications for education of findings from the behavioral sciences. This is done through brief discussions which are interspersed with lectures and the culminating discussion of a unit. Full-period discussions are preceded by several sessions devoted to systematic presentation of information, concepts, and research studies. The summation of a topic is a question, such as "How can schools and teachers help children from deprived socio-economic environments?", or "How can schools and teachers help children from minority groups solve problems that inhibit their best performance?" The question is written on the blackboard. Each student's suggestion is listed under the question, discussed, and analyzed in terms of practicality, appropriateness, and difficulties of execution. As much as possible, group problems rather than individual problems are considered, and solutions are those that classroom teachers and administrators rather than psychologists might carry out.

David E. Shawver, Assistant Professor of Education, Washington State University, Pullman. Teachers in the elementary and secondary schools have been forced to consider such problems as the part interest plays in developing a good learning situation, the necessity for active involvement of learners in the teaching situation, and the need to consider individual differences. The elementary and secondary school teachers generally recognize their responsibility to the student—to help him in every way possible to get the most out of the learning situation. By contrast, the college level teacher has often seemed to operate on the premise that the entire responsibility for learning was the student's and that the instructor was there to offer his knowledge but had no special responsibility in developing a psychological atmosphere that was conducive to learning. This attitude has often been exemplified by such comments as "We're not here to 'spoon-feed' students—it's up to them to get the material." For a college instructor of professional education it is impossible to ignore the teaching practices of public school teachers. They are his primary concern. How, then, must he operate in his own classes so that the prospective teacher (his student) can most effectively be prepared for teaching? It seems imperative that the college instructor should practice the principles of teaching which he wishes his own students to practice as they teach. The college professor who fails to "practice what he preaches" also robs the student of a laboratory experience in teaching methods. A person needs actual experience with methodology. Reading and theorizing about teaching can never be adequate preparation for teaching. Conviction that too heavy a dependence upon lecturing as a method of instruction results in a lack of mental involvement of the learner has prompted the writer to give attention to such techniques as student-teacher planning, use of small discussion groups, and an attempt to make class work problem-centered. In some semesters the use of small discussion groups has made it possible for the total lecture time to be reduced as much as two-thirds. These groups discuss educational problems of a controversial nature which are chosen in some cases by the instructor and in other cases cooperatively with the students. These small group discussions are consistently rated by students as being the outstanding aspect of the course.

Lynn S. Stein, Associate Professor of Science Education, Pacific Lutheran University, Tacoma, Washington. A course such as "Science in the Elementary Schools" may be most informative when conducted in a manner so that the students' creative ability is challenged and so that they are involved in classroom instruction. Procedures in the classroom are built around five activities that the writer feels are essential to a group of students who aspire to teach: developing a science corner; sharing a science idea; a student demonstration; evaluating the demonstration, and further discussion by the college instructor. Each student appears before the class on three separate occasions during the term and performs one of the first three activities each time so that he experiences how each is to be done. The science corner is an "interest getter" consisting of a bulletin board with a small table below it. A former student used the following caption for his bulletin board, It's for the Birds, and below it, attached to the board, was a hummingbird's nest. The table beneath contained other nests, stuffed birds, bird skins, pictures, and several excellent reference books, all assembled in an attractive manner for the students to observe and handle.

The student responsible for the science corner is allowed five minutes to relate at which grade level it is appropriate, its relationship to the lesson and how it is to be used. The next ten minutes are used for Sharing a Science Idea.

In the classroom demonstration, the student is required to submit a lesson plan. The instructor assigns the student, insofar as possible, to a demonstration in an area that he previously designated as knowing very little about. The intent is to teach the student to stop retreating from that which is difficult and to make an honest attempt to develop some knowledge and background of the material in that particular area. The students are further cautioned in developing their presentation not to water down the demonstration or to underestimate the ability of elementary school children. The demonstrator is rated by his peers and by the professor.

Haskell C. Phillips, Professor of Biology, Austin Peay State College, Clarksville, Tennessee. By far the best teaching aids that we have are hundreds of color photo-micrographs. These are projected on the screen for class discussion purposes with the room only partially darkened. This allows students to take notes and make sketches as needed. This is the only practical method that I know whereby a teacher can be sure that all members of a class are seeing the exact microscopic features he wishes to emphasize. Even the anatomy of the vascular bundles of a corn stem, magnified 8,000 times, can be viewed. The photo-micrographs do not substitute for the microscope, but supplement and intensify its use, for later the microscope slides are distributed and the students study them more intently. They will ask questions about anything new they discover in such a slide, but not once in the ten years that I have been using this method have I heard the old familiar statement from a student, "Come and see whether I'm seeing what I'm supposed to be seeing."

George H. Gloege, Professor of Chemistry, Eastern Montana College of Education, Billings. A 1958 study indicated that laboratory manuals did not stimulate the use of the scientific method; that few were used extensively; that many were too bulky; that experiments had to be carefully selected; and that frequently the directions had to be modified. It was recommended that a type of laboratory manual which makes use of the "open-end" experiment be developed. In the open-end experiment, there are no blanks to be filled in prefabricated sentences; a written report is required and answers cannot be anticipated before starting the experiment. Students are asked to make predictions and to verify or disprove them. Educational research indicates that there is a place for demonstration, but it was recommended that individual laboratory work be continued and strengthened by developing instrumental skills, problem-solving skills, scientific attitudes, appreciations, and interests.

In line with the study, the following steps have been taken to improve the quality of laboratory instruction in general chemistry: the number of experiments has been considerably reduced (from 72 per year to 21) and longer and more challenging experiments substituted; the filling-in of blanks has been completely obliterated; the use of quantitative experiments and unknowns has been instituted; either a scientific report or a quiz is required as the culminating exercise for each experiment. When the report is required it is of the essay type, and must show thought and problem-solving ability. Data sheets are attached to the report or the quiz to substantiate the explanations given.

Every assigned experiment has provision for an optional open-end experiment for students that wish to do extra laboratory work.

Donald Treadgold, Professor of History, University of Washington, Seattle. The comic strip character, Nancy, once reported that her teacher "talked about the Civil War as though it really happened." What is needed in the teaching of history is the depicting of the reality of events and the connections between them. I have sometimes asked a freshman student on completing the study of some intricate series of historical development (for example, the English revolution) to tell the rest of the class aloud, without preparation, the outlines of the story without mentioning a single proper name or date. At the end of the student's account, another student may say that the first "left out Hampden." How does he know? He has mentally made the connection between the essential characteristics of the main actors in the drama and their names, which the other student was arbitrarily required to leave out. "Names and dates" are elusive only if they are not understood. The teacher must also help the student learn to deal with conclusions, for he must learn to examine the conclusions of the historians he reads.

Sister Letitia Mary, Professor of History – Sociology, College of the Holy Names, Oakland, California. I am often dismayed to find that students consider the study of history a matter of memorizing dates and battles and names of persons; the fall of this, the rise of something else. Courses in the history of Western civilization, for instance, are difficult; they cover too much material; they deal with ideas and concepts which are far from the experience of the student. And even though the lecture may be entertaining, interesting and well-organized, the student may miss much of what he should be getting. With the very large class there is little choice, but the smaller group should gain much from class participation through sustained intellectual activity. A class in American government woke up to the human forces in government after reading and discussing Allen Drury's Advise and Consent. It is scarcely a political treatise, but that class contained a group of girls to whom government was something far from their own experience, safely to be left to somebody else's concern. They enjoyed and I think profited by a class presentation of the process by which a bill becomes a law.

Robert S. Funderburk, Professor of Geography, Central Washington State College, Ellensburg. One of my basic purposes in teaching geography is to help students develop an understanding of the differences in human response to physical environment that are found around the globe. Why do the people of Iowa and the humid pampa of Argentina have different responses to their fairly comparable physical environments? In Iowa the family-type farm is still dominant, while on the pampa the large estancia is typical. Preston James has a classic generalization which applied here: "The significance of the physical conditions of the land depends upon the attitudes, the objectives, and the technical abilities of the inhabitants."

Another basic purpose which I have in teaching geography is to help the student develop some sense of the reality of any region we study, i.e., to visualize it as it actually is, so far as possible. To help achieve the purposes mentioned, I have concentrated on certain basic procedures: extensive travel and field study; color slide collection; and short local field trips.

Selection of Objectives

John O. Reynolds, Professor of Mathematics, East Carolina College, Greenville. We are in business solely for the student. His welfare and progress are the only reasons for the existence of institutions of higher learning. Hence, any objective or technique must be directed toward the learner for his benefit.

J. Donald Hawk, Professor of Education, Tift College, Forsyth, Georgia. The objectives of the course which I teach are selected by various means. The institution has established some basic objectives which the course should seek to meet. After deliberation, the department adopts goals which the course should meet. Another way to select objectives is to check with the institutions in the locality, or to discuss them at professional conferences with instructors who teach comparable courses. Objectives are also ascertained on the basis of assumed needs of students. Backgrounds and interests of students are taken into consideration in developing these objectives.

After a brief introduction to the course, students are given an overnight assignment to formulate personal objectives for the course. In setting up objectives, students are urged to be candid in stating their reasons for enrolling in this particular course. These statements may begin with "This course is required," or "I need five hours credit." Generally, however, the student will also indicate some more fundamental reasons for taking the course. These are written and handed in. A compilation of objectives common to a larger number of the class membership are added to those of the teacher (unless the teacher's objectives already anticipate the students). This set of common student-teacher objectives serves for guidance throughout the course.

Raymond E. Schultz, Professor of Junior College Education, Florida State University, Tallahassee. Failure on the part of instructors to identify course objectives is responsible for much of the "aimlessness" encountered in education at all levels. An especially helpful source in formulating course objectives is the little book, edited by Benjamin S. Bloom, entitled Taxonomy of Educational Objectives; Cognitive Domain.[1]

First, it helps me to state objectives in such a way that they focus on changes to be produced in students. Second, it helps to develop course objectives that involve the higher levels of the cognitive domain, i.e., focus on learning at the levels of application, analysis, synthesis, and evaluation. Finally, the sample test items contained in the book are helpful in developing items which assess learning at these higher levels.

Liza Spann, Professor of Zoology, Murray State College, Murray, Kentucky. A proposed test of teacher objectives: (a) To encourage the student in the quest for excellence, and to instill within him the desire to develop his potential to the maximum; (b) To arouse intellectual curiosity; (c) To aid the student in developing a knowledge, understanding, and appreciation of the subject matter; (d) To assist the student in acquiring a working knowledge of the terminology of the subject; (e) To teach the theories, laws, and principles involved as well as ways of applying them in daily problems; (f) To guide the student in developing skill and technique in the particular field; (g) To cultivate proper attitudes essential for good citizenship.

Haskell C. Phillips, Professor of Biology, Austin Peay State College, Clarksville, Tennessee. Just as a pure water supply is more important to the population of a city than a skilled ear surgeon, so we feel that general biology is more important to the total school program than is any one specialized course such as bacteriology. There are fifteen times as many student hours spent in classes of the former than in the one section of the latter. Also, general biology is the only college science course many of the students will ever have. Therefore, we spend considerable time trying to make each of the three quarters in biology as good as any course on any campus.

Ernest L. Karlstrom, Associate Professor of Biology, University of Puget Sound, Tacoma, Washington. We must remember that today the entering college student has a wide range of capabilities based on a highly diversified high school education. An increasing number of the brighter students are entering or will be entering our science courses with experience based on more advanced curricula and teaching. In biology, the most significant experiment has been that of the Biological Sciences Curriculum Study (BSCS), initiated on a limited scale during the year 1961-62. It remains to be shown that the freshmen exposed to BSCS and other up-graded approaches will be entering college biology courses with a better command of biological principles (the first wave of BSCS graduates will be in 1964), but certainly there are many indications of the more rigorous science training in the grades and high schools today. For those freshmen, better prepared through previous up-graded course work, participation in science fairs, etc., the collegiate course should not represent mere repetition (even in some cases a step backwards) in terms of their scientific and general educational development. Arnold Grobman, the director of BSCS, points out that in pursuing its goals to improve high school biology the Study is creating difficult and challenging problems for collegiate departments of biology. Those of us engaged in college teaching must agree with his statement that this is a "healthy situation" for which BSCS need offer no apologies. For very sound and practical reasons, college instructors should become aware of and if possible participate in these significant developments in high school education.

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[1] Bloom, Benjamin S., ed. Taxonomy of Educational Objectives; Cognitive Domain. New York: Longmans, Green and Company, 1956. 123 pp.

Espy W. Miller, Professor of English, Glenville State College, Glenville, West Virginia. While formal grammar is not taught as a self-contained, isolated discipline with its own esoteric value, a valuable objective for English teachers is to impart to students that skillful and competent use of language implies a thorough mastery of the nomenclature, principles, and rules which govern language patterns employed in speech or in writing. Knowledge of the historical development and structure of the English language is deemed necessary for all students.

Roscoe H. Playforth, Professor, Division of Social Studies, Morehead State College, Morehead, Kentucky. In teaching the social studies, decision-making should be emphasized in contrast with mere retention of isolated facts. Teaching by cliches no longer suffices. One must go beneath those patent processes to find the what, why, and how of materials and information. In so doing, basic objectives become more than that of creating craftsmen in the area. Creative thinking by the students becomes the second basic objective of social science instruction. An important objective should be the development of creativity in decision making. This involves at least two levels: (a) decisions concerning what a body of descriptive data means, how these data may be summarized or generalized, and what social principles they suggest or support; and (b) policy determination which requires a synthesis of facts, principles, and values usually not all found in support of one side of any question. In classroom procedures, teachers should foster decision-making which is reflective, speculative, thought-provoking, and oriented to the process of reaching conclusions.

Clyde M. Leathers, Professor of Health Education, Tennessee Agricultural and Industrial State University, Nashville. The program for the student with temporary or permanent disabilities should be designed to help correct those temporary conditions which can be improved or to aid in adjustment within the limits of the disability. In the program of the non-handicapped student, the relationship of physical education and recreation to health and fitness is dependent on the individual's values and the intensity of his wish to live most effectively within his potential. Some suggested objectives of this program include: the opportunity to learn and acquire by firsthand experience the level of fitness required for successful participation in one's chosen sport or field of interest; a knowledge of the effect of physical exercise upon fitness and an opportunity to learn exercise activities which will have lifelong use; and an adequate knowledge of hygiene and safety principles related to sports participation.

Bernarr Cresap, Professor of American History, Florence State College, Florence, Alabama. Two objectives might well be pursued in the teaching of any advanced history course. The first is to bring students into contact with a body of useful knowledge from which they may derive understanding. The second is to help students acquire a technique for gathering facts, critically evaluating them, and reflectively thinking about them to arrive at wisdom. The technique is the inductive method of science utilized insofar as it is applicable in the study of history.

Ina Faye W. VanNoppen, Professor of History, Appalachian State Teachers College, Boone, North Carolina. To make the college a center of living scholarship, we encourage students to collect and synthesize data from the immediate surrounding region which may in turn guide further research concerning our own educational, social, and economic problems.

Jean Voyer, Associate Professor of French, Nazareth College, Nazareth, Michigan. Our objectives are the same as those set forth by the Modern Language Association: understanding, speaking, reading, and writing. The first two have become the most important in our teaching. The subject matter is carefully planned and differentiates between the two-year and the four-year student. We emphasize mainly the acquisition of the first two skills: understanding and speaking. Reading comes later, and writing, (creative writing) comes last. One reason for this order is that many programs emphasize the necessity of ear training through sound first. A supporting reason is that most of the incoming freshmen lack the experience in hearing and speaking a foreign language necessary for an intelligent study of printed material. A third reason is that students show great interest for learning a modern language through its use. Development of the reading skill is more gradual and less intensive until some mastery has been achieved in understanding and speaking.

Emily Ann Smith, Professor of English, Berea College, Berea, Kentucky. In general, a teacher cannot judge the effectiveness of his own teaching. Through the years there is, of course, an accretion of some proof (student performance and student testimony, for example) which is usually not professionally specific. And perhaps there is recognition by professional observers, but it is difficult to estimate one's self as a stimulator of minds, or to know why one remains deeply concerned with the process of teaching. It is particularly difficult to analyze the process. However when a teacher observes over and over again the development of the human mind, he ceases to hesitate and moves on in his business of teaching.

Maintaining Professional Competence

Orin B. Graff, Professor of Educational Administration, University of Tennessee, Knoxville. New knowledge is being produced at a rapid and accelerating rate. In a very definite sense, new knowledge supersedes the old with respect to its efficacy in the solution of the problems of our culture. Making such recent information available to students depends largely on the desire and ability of the staff to keep informed of cultural changes and current developments in the basic disciplines, and to utilize such knowledge in their research and instruction. Such conduct among professors creates a stimulating environment where students are challenged to similar creative effort.

Liza Spann, Professor of Zoology, Murray State College, Murray, Kentucky. To keep up to date, the following steps are suggested: undertake research projects and regulate teaching schedule accordingly; subscribe to professional journals and request that others within the field be available in a departmental library; participate in summer institutes, workshops, and seminars where "refresher" courses are offered; hold active membership in professional organizations; read current texts and methods manuals to keep informed of new developments and techniques; and advocate seminars within the department with both student and faculty participation.

Mary Jane Loso, Associate Professor of English, Eastern Oregon College, La Grande. The entire matter of effective teaching bears a close relationship to John H. Gardner's discussion of the education needed to create an "ever-renewing society." If, as Mr. Gardner suggests, the effectiveness of education may be judged by its capacity to produce versatile and self-renewing individuals, surely teachers themselves must be self-renewing men and women. The ineffective teacher, adequately trained and experienced though he may be, appears to lack precisely the qualities Gardner considers essential to the self-renewing man: versatility and adaptability; high motivation and respect for the source of his motivation; continued development of his own potentialities and continuing self-discovery. If self-renewal is imperative for the future of a society, then perhaps all means of encouraging self-renewal in teachers must be explored.

Jack Ashley, Associate Professor of English Literature, Troy State College, Troy, Alabama. I have several ideas for keeping professionally alive. First, the teaching load should be reduced. Second, to allow for more intensive work, student load sould be reduced (in my case over two hundred students). Third, time should be made available for further research and writing. Fourth, less time should be consumed in committee and faculty duties and meetings. Fifth, there should be as little overlapping as possible among departments. Sixth, the teaching group must do everything possible to preserve and promote academic freedom within a given institution.

Charles E. Keys, Professor of Zoology, Asbury College, Wilmore, Kentucky. The most valuable contribution to my professional life is the undergraduate research program at the college. I have a research assistant and from time to time students enroll to do research. This type of activity stimulates me to learn new methods and to keep up with the developments in my field. Undergraduates do most of the research, but under my direction. This adds considerable depth and life to my teaching.

Emily Ann Smith, Professor of English, Berea College, Berea, Kentucky. The most obvious and essential needs for a teacher of English are time to read, write, and talk. A teacher of English needs to write rather copiously, perhaps creatively, certainly critically. The one keeps his blood alive; the other keeps his mind sharp. It is necessary for teachers to know works of literature in depth, returning to them again and again. Then comes criticism; then discussion of the literary composition with colleagues; then expansion and sharpening of opinion. Administrations in general are remiss in that they do not diligently and expressly encourage intellectual cross-fertilization among and within departments. For a teacher of English, traveling in England and France is certainly a stimulus for professional vitality. Visible history and literature in England vivify for the teacher what he is doing, give him perspective in time, some of which he is sure to convey to his students.

A. Ford Haynes, Jr., Associate Professor of Guidance, Memphis State University, Memphis, Tennessee. In supplementing his campus schedule the college guidance teacher should make it a point to spend as much time as possible visiting in high schools and junior high schools. He also should spend a good bit of time working with school systems in their on-going in-service education programs. The many opportunities provided to serve as coordinator or member of visiting teams for the purpose of secondary school accreditation or re-evaluation are helpful and stimulating.

Annie L. Sheffield, Associate Professor of Child Development, Albany State College, Albany, Georgia. A consultant on the improvement of instruction serves the college for faculty orientation each year when school opens in September. One or more consultants may be called in during the school year to work with the faculty in further development of their instructional efficacy.

Walter H. Ellis, Associate Professor of Chemistry, Florida Agricultural and Mechanical University, Tallahassee. Professional growth and development in the field of chemistry is enhanced by a program of graduate study. Attendance at seminars and the general stimulation afforded by the presence of graduate students is a factor which enhances growth. If the instructor is associated with a department which has a purely undergraduate program, he must then depend only on research, reading, and meeting attendance for his intellectual life and growth.

Wesley E. Lingren, Assistant Professor of Chemistry, South Pacific College, Seattle, Washington. Examination of the faculty handbooks of small colleges will almost without exception reveal a section which lists the normal means by which one is judged to be professionally alert, e.g.: summer study, membership in professional societies, publications, etc. Most administrations recognize the value of continuous education of their faculty members in principle, but a serious doubt arises as to whether or not these same administrators actually implement these lofty ideals in more than a perfunctory fashion. For example, how many faculty members in small colleges are actually given reduced teaching loads so that they may devote part of their time to professional development as outlined so clearly in the handbook? How many department heads are given adequate relief from the burden of academic administration trivia with which they are often burdened so that they may write the book they have thought about for years? What incentives are offered to encourage teachers to be active and productive in their fields? The number of years of successful teaching experience as the main criterion for promotion can hardly be considered an incentive. It is, therefore, the responsibility of the administration to see that adequate opportunity and sufficient motivation are provided each faculty member so that a high level of scholarship is reached and maintained. Failure to do this reflects in a tangible way the real thinking of the administration towards scholarship and its relation to teaching. It is time for the small college administrators to clearly recognize that the attainment of the doctorate is not the end of a man's productive scholarship but rather only the beginning, provided adequate opportunity is given.

Charles J. Flora, Associate Professor of Marine Biology, Western Washington State Collage, Bellingham. Research is the absolutely essential companion of good teaching. The spark and enthusiasm so important to the teacher will burn only as long as intellectual fuel is provided. I believe that a teacher is best when he is better in something else, and that something else should be a research area which interests him intensely.

Evaluation Procedures

Charles L. Hayes, Professor of Education and Psychology, Agricultural and Technical College of North Carolina, Boone. We want to do something with the students who seem to be fatalities in certain curricula at college; to help these people find themselves if they are salvable. This is done by identifying first those persons whose grade-point averages have fallen below standard and who show by their test scores that they have the ability to profit from instruction. We hope to take these students and give them courses in reading and in study habits as well as the tutorial courses in their subject matter areas.

In an effort to improve instruction on the college level we must not expect to achieve any degree of success without knowing the kinds of abilities which we have in our classes. First, it is recommended that some kind of testing be done to determine the abilities which students have. It is not enough to know that the student has had the prerequisite courses. One should know what kinds of backgrounds these people bring with them academically as well as socially, so that proper planning can be facilitated with reference to the teaching of the class. Many college students report that they could do their college work if they just knew how to study. There are many tools on the market which can be employed to help determine the level on which the student is best able to operate.

H. Warren Robbins, Associate Professor of Education, Union College, Barbourville, Kentucky. The teacher feels that one of the essential requirements for an effective evaluation of the student's work is to know the student as well as possible. The following steps are utilized in the evaluating process: an autobiography is required of each student and a self improvement test (standardized form) is given to the student during the early part of the course. At the end of the course the student again rates himself. Such items as personal traits, qualities and competencies necessary to successful teaching are included in the list. Each student is asked to list his proficiencies and deficiencies through a self evaluation process. For example, if the student feels he needs to improve his grammar or expand his background of knowledge pertinent to his major or minor field, he is required to show tangible evidence of how he plans to do it. Personal conferences of an informal type are held with the students in order to know them better. Cumulative records showing standardized test scores (both ability and achievement results) as well as reports made by professors are studied.

Robert J. Zaworski, Assistant Professor of Mechanical Engineering, Oregon State University, Corvallis. Many teachers reject the alternatives of teaching only the top percentile of their classes and ignoring their other students or of making everyone keep the same pace. For such teachers, one possibility is the use of a more individualized testing technique—one which evaluates, and hence, emphasizes how well a student learns rather than how much he learns. Such a technique, as applied to three engineering courses, is the subject of these comments. A quiz was given each week in the first hour of the recitation period. Each quiz had two parts: a short (10-minute) section on the vocabulary, concepts, and physical laws currently under discussion; and a qualifying section (50 minutes) consisting of a problem in the application of a particular part of the course material to an unfamiliar but realistic situation. No make-up quizzes were given. The first part of the quiz was the same for everyone in the class; the second part was different for different members of the class, depending on their previous accomplishments. Each student's paper on the qualifying section-problem was reviewed and evaluated as either acceptable or unacceptable engineering work, based on the student's completed analysis of the problem and his presentation of it. If the student's work was accepted, he was considered as qualified in the application of that part of the course material. If the student's work was not accepted and the area considered basic, the next weekly quiz period was used to re-test him on the application of the same material to another unfamiliar but realistic situation. Only after doing acceptable work in that particular part of the course was he allowed to attempt to qualify in the next. To save class time, the parts were handed out separately. While all were working on the first part, the appropriate problem-section was placed face down on each student's desk. At the end of the first ten minutes the common part was collected. The common parts were graded on the spot by the instructor while the students worked on the problem-sections for 50 minutes. The problem-sections were then collected, the graded common parts were returned, and the remaining 40 minutes of the period were spent in the discussion of the qualifying problems, covering the most advanced first. The procedure proved quite effective. The best students were able to progress at a challenging rate; the bulk of the classes were encouraged to do quality work and had the additional benefit of multiple exposure to the more difficult or complex parts in the discussions immediately following the quizzes. The poorer students were held to knowing at least a few things well rather than a superficial smattering of a great deal.

This procedure becomes increasingly demanding on the instructor. To provide each week a set of suitable problems which are unfamiliar to the student (to stress understanding of the general approach) and yet realistic becomes no small task as the term wears on. At the end of a term, when the range in levels was greatest, the satisfaction of this demand became quite time-consuming and tended to take time intended for lecture preparation and study.

The student reaction, as indicated by written comments collected upon the completion of each course, was generally favorable to the continuation of the procedure with modifications. Specifically, many felt that too much emphasis was put on accuracy, and suggested that the acceptable/unacceptable classification be based on completeness and correctness of method only with assignment of a number grade for accuracy. Others suggested a limit to the number of tests in an area whether or not the student qualified.

Henry Knapp, Associate Professor of Secondary Education, University of Nevada, Reno. We need to re-examine our testing and grading procedures as our present patterns of pupil appraisal may be obsolete. Selective admission, which creates a very skewed distribution of abilities, will demand change in grading procedure. In addition, in our quest for efficiency and money-saving measures, we are going to be ruled more and more by computers and similar devices, which will affect testing. In addition, when we evaluate a student's performance, we usually omit our criteria for terminal behavior. A course description should spell out the desired outcomes which a successful learner should be able to do at the end of the course.

The subjective type of test is often the most compatible with the course objectives in many types of instruction. Two or three essay items at the end of the objective portion of an examination are often helpful to the instructor. I have objected to the usual alternate response type of test; recently, I have discovered some merit to the "modified true-false" question.

Compound:

Tt Tf Ft Ff   Alaska was formerly a Russian territory; its purchase by the United States was in 1867.

Complex:

Tt Tf F   Southeastern Alaska is generally warmer in winter than the Dakotas due to the winds blowing over the Japan Current.

The former stresses the understanding of facts in combination while the latter emphasizes effect-and-cause. Note in the latter, that if the main clause is false, the whole item is considered erroneous. Test statements of this type decrease the guessing factor as three or four choices are involved. Better accepted has been another type of modified true-false item which I have used recently. Students respond in the blank at the left only to the "true" statements, as in the following example:

________ The largest city in our 49th state is ________ Anchorage.

If the item is false, the pupil is to correct the underlined word or words and change them in the blank at the right so that if they were inserted the statement would read correctly. This procedure involves both recognition and recall in the student's response.

The "feedback" principle of programmed instruction is utilized when students who finish are permitted to see the key projected by an overhead machine in an adjoining room. Showing of the key again as the test papers are returned usually is a great time-saver; the practice eliminates a lot of verbal explanation and only a few of the items may be questioned.

Raymond E. Schultz, Professor of Junior College Education, Florida State University, Tallahassee. I find the traditional mid-semester and final examinations inadequate and try to give at least three or four tests during a course. Even with the pressures of enrollment and time, I cannot bring myself to rely to any great extent on the objective type of test item. It is my considered opinion that few instructors succeed in developing items of this type that assess other than factual knowledge. Students obviously concentrate on that learning which determines their grades. Consequently, the instructor who determines the course grade entirely from the results of objective tests is almost certain to sacrifice important objectives at the higher levels of learning.

Charles E. Keys, Professor of Zoology, Asbury College, Wilmore, Kentucky. We use set-up laboratory practicals to assess students' learning in biology. Questions concerning structure and their relationships are written on cardboard tags and then tied to the appropriate structure. The questions are numbered and the students are given quiz sheets which are numbered in the same manner. Students are then permitted to move from question to question in any order, but they are not permitted to return to a question once they have left it.

Areas for Personal Improvement

Roy G. Bigelow, Professor of Secondary Education, University of Southern Mississippi, Hattiesburg. In teaching the same courses from quarter to quarter, one tends to depend too much on notes and lectures prepared in the past. Teaching materials for next quarter's class become the only source of material instead of a standby source and become stale without new and fresh resources. Teaching, in this case, descends to a mechanical process instead of being a challenging and invigorating experience. Years ago, we knew a college plant that burned down, destroying most of the professors' lectures. For days they walked about distractedly not knowing where to turn. The fire resulted in a new and modern plant and a new enthusiasm, as well as some new lectures, notes, and jokes. Doubtless this last gain justified the fire.

Annie L. Sheffield, Associate Professor of Child Development, Albany State College, Albany, Georgia. I want to try out different types of teaching machines and study the effects on students' learning. I want to make contact with television teaching as a medium for helping education majors close some of the gaps between theory and practice. In the area of student teaching, I want to find some solutions to the problem of improving the quality of professional laboratory experiences for students before and during their apprenticeship.

Rev. William N. Bischoff, S.J., Professor of History, Gonzaga University, Spokane, Washington. I use outline notes to keep myself moving forward and to restrain myself from wandering too far up a favorite bypath. The admitted danger of a lecture course stagnating in pet notes is avoided by destroying a portion of the notes each year and re-doing that section of the subject. The companion safeguard is faithful preparation for each lecture no matter how often one has given a course.

Lafayette Parker, Professor of Education, Winston-Salem State College, Winston-Salem, North Carolina. I am interested in seeing a program of teaching clinics on the college level where the procedures of classroom teaching can be reviewed and criticized. I believe that systematic analysis of the results of instruction is a means of improving instruction.

Sister M. Theodora Breighner, Associate Professor of Mathematics, Ursuline College, Louisville, Kentucky. My teaching could be greatly improved if I could have more contact with industry and could obtain more insights as to the application of various mathematical principles. I believe that the teaching field needs to communicate more with industry or research. Cooperative research among departments is another area that needs improvement. Students need to use their mathematics in concrete situations or they come to graduate work with the concept that mathematics is a manipulative process by which one hopes to obtain an answer listed in the answer book. Situations must be created where they will be forced to think as mathematicians.

John O. Reynolds, Professor of Mathematics, East Carolina College, Greenville, North Carolina. I would like the time and opportunity to take refresher courses in my field. To have occasion to sit at the feet of some of the master teachers I have had would renew not only knowledge in my field, but also would give me inspiration and determination to do a better job in my work.

Wilbur H. Baisinger, Professor of Speech, University of Puget Sound, Tacoma, Washington. Each of us is a college teacher, yet which one of us has not been shocked on occasion to discover that our students were bored because we had unaccountably become bored ourselves. "What a dull class," we mourned inwardly, "and I'm teaching it." Certainly, the teacher who has missed this experience altogether is curiously out of touch with his students. How can we insure that we will approach our classes with a contagious freshness and zest? Fortunately, a number of avenues are open to us. Student-faculty exchanges of opinion afford a source of stimulation for the busy teacher. We all eat lunch (or try to); why not, on occasion, with our students? Even the informal coffee break provides a setting for the give and take of views. If such an interchange is to be useful the student must feel completely free to express himself. The clear-cut assignment that nonetheless remains obscure to the student mind, the concept which the student can define verbally but does not really understand, can emerge in a relaxed atmosphere that invites genuine communication. If the teacher has a truly inquiring mind, there are surely many classes on campus, outside his own department, which would be fascinating to him. Why shouldn't art instructors attend a class in archaeology, or speech instructors a class in history or psychology? Or why not all of the former follow a literature class? Finally, there may be a great deal more in the way of refreshing research that the college teacher can do in his own classroom. If he has habitually presented certain units in the form of lecture, he may modify his approach and have students research and report on some of this material, and attempt an objective comparison of student learning through various methods. Or he may inaugurate a modest unit of research in which his students participate. Teachers of public speaking often use crude change-of-opinion polls in this manner as a means of measuring the influence of emotion-charged language, or the utility of tight logical argument as compared to extensive use of motive appeals. However crude the results of such research, it can be stimulating to both student and instructor.

Jesse H. Garrison, Associate Professor of Curriculum-Administrative Education, Oregon College of Education, Monmouth. At least three variables should be included in making decisions about appropriate teaching behavior: the nature of the material to be learned, the mind of the student, and the personality of the teacher. Attempts to generalize about formal vs. informal, directive vs. non-directive, and authoritarian vs. democratic represent a fatal weariness with intellectual activity and a desire for conclusions uncluttered by fact.

As an unfrocked priest in the doctrine of psychology I am inclined to ask (please note the role consistency) a few questions: (a) Are some of us using students to gain revenge on a society which has never really appreciated us? (b) Do some of us insist on playing a narrow, false professorial role because we feel guilty about our ancestry? (c) Do some of us cater to the whims of our students because we fear rejection? (d) Do some of us use tests, forced attendance and arbitrary assignments as a means of gaining ascendency? (e) Do some of us teach in order to gain time to engage in other activities which we see as more important? (f) Could we translate the psychological needs implied in these questions into more productive and ultimately more satisfying behavior?

My field of study and my values cause me to assume that these are the most important questions. I assume that quite different questions would be asked by a scientist, an artist or a musician. I assume also that someone else in education might ask different questions. The point is that the questions (and the answers) grow out of the variables which constitute the problem. Whether this improves teaching depends on the diligence, the honesty and the capacity of the individual conducting the quest.

Richard H. Hagelin, Professor of Physical Education, Eastern Washington State Coolege, Cheney. Many teachers make no effort to prevent student failure; some even strive to cause such failures. Some of them even regard failures in their classes as evidence of good teaching, and the maintenance of high academic standards. Unfortunately these teachers have failed. Such an individual is ignorant rather than brilliant; he has failed to develop skills in knowing the students, the methods of teaching, and his subject.

Conversely, the superior teacher attempts to anticipate and to forestall failures. He places emphasis upon success in his courses and good work in the subject area. He attempts to improve his method of teaching, or change it, if many students appear to be failing. The good teacher never closes his own mind to improving his techniques of instruction. In the case of his own mistakes, the good teacher is willing to acknowledge the errors he makes. He recognizes his errors and profits from them, and he endeavors to avoid them in the future. An important attitude held by the successful teacher is his emphasis and insistence upon the positive results rather than negative; upon excellences, rather than errors.

Relations with Students

Sister M. Theodora Breighner, Associate Professor of Mathematics, Ursuline College, Louisville, Kentucky. Too close a relationship between teacher and student leads to that type of imitation or adulation that stunts the development of the individual talents that would make the student realize his true potential. On the other hand, if the relation between student and teacher is too formal or of the kind in which a teacher does not even know his own students, then the need of recognition and encouragement often necessary to spark a latent talent is missing, and this talent may well never be discovered or used. The happy median exists when the student feels that the teacher is interested and wants to help, and learning is imbued with a real spirit of give and take. Praise and constructive criticism are both necessary tools in dealing with students. Students as a whole are fair-minded and accept correction and criticism as a sign of real interest where it is merited and administered in a way that shows that the teacher has the student's good in mind and is not trying to be vindictive. Students want teachers to be hard on them within the boundaries of justice and right reason. They want to learn and to study and expect teachers to make them do so, in spite of their complaints. I find that knowing the individual outside the classroom gives me a true basis for these conclusions. To do a superior job of teaching with only classroom contacts with a student is impossible; the current of learning must bridge too wide a gap to produce maximum efficiency. A sense of humor and understanding must always be present in dealing with students.

Gilbert J. Farley, Assistant Professor of Education, University of Miami, Miami, Florida. The writer has an evening and/or an afternoon at home for his students each week. A general invitation is extended to the lecture groups with the announcement of the "conversation piece"; currently it consists of one of the recorded conversations from WISDOM (Decca). Since physical limitations determine the maximum number who might attend, a list of twelve blank spaces is posted each week and the students interested in attending indicate this by signing their names or initials until all spaces are filled. The main objective of such a gathering is for the writer to get to know the students. A secondary objective is to encourage discussion of current topics related to education and the teaching profession in particular. The meetings have proved to be successful in terms of these objectives.

Mary Tom Berry, Assistant Professor of Elementary Education, Middle Tennessee State College, Murfreesboro. An "open door policy" is maintained during office hours. Students are invited to discuss any phase of their work in private conference. Grades are freely discussed when questioned, and an effort is made to give an inquiring student complete understanding as to how grades are determined.

Orin B. Graff, Professor of Educational Administration, University of Tennessee, Knoxville. Advising students is directed toward assisting them to define objectives, appraise their competence, and project program plans. This emphasis is continued in the instructional processes. The professor considers a satisfactory understanding of each student's program needs a prerequisite to effective conduct of the class. In turn each student is expected to accept responsibility for a reasonable understanding of what this particular course may contribute to his planned program. Under favorable conditions a very high level of intelligent inter-communication among professor and students is achieved.

Organization of Subject Matter

Harold F. Burhans, Assistant Professor of Business Administration, High Point College, High Point, North Carolina. It does not take the conscientious student long to know whether the lesson for the day has been properly organized in a logical and sequential manner. Failure to comprehend subject matter may be due to lack of proper organization in presentation of the material. An important criterion to keep in mind is the necessity of relating the material under discussion to what has preceded it and that which is to follow. Failure to do this results in increasing the difficulty which the student experiences in correlating the objectives of each lesson. The successful teacher considers various levels of ability and achievement in the class in order to obtain maximum results from each student.

Annie L. Sheffield, Associate Professor of Child Development, State University of New York at Albany, Albany. An outline is developed for each course in our college according to requirements set forth by the Academic Dean who serves as chairman of the Committee on Instruction. The instructor is given an option as to whether he will use the text book organization of subject matter, the unit plan, problem-solving technique, or some other plan. There are common features followed in the organization of subject matter: clear statement of objectives (both general and specific); organization of subject matter by units, topics, or broad problem areas; orderly arrangement of activities for students' learning experience; carefully selected references from the library; reading assignments (basic text and collateral readings); listing of films, other audio-visual aids, and sources; basic requirements to be met by students for reading, taking notes, and doing written work such as: special reports, a term paper, and specific conditions relating to grading, including the percentage count for each major requirement; ways and means that the instructor will use to evaluate the students' progress.

Sister M. Theodora Breighner, Associate Professor of Mathematics, Ursuline College, Louisville, Kentucky. I enter the classroom to teach when my subject matter is organized along these lines: the basic principle underlying the theories and problems to be taught is clearly understood; models and/or examples that best demonstrate the principle and the resultant theories are at my finger tips; the historical and philosophical background of these theories is farily well absorbed; different authors' approaches to these theories (the basic assumptions and logical reasons they used to prove them) are at hand; questions to provoke thought and further research on the part of the student, particularly in the applied fields, are at hand.

Roscoe H. Playforth, Associate Professor of Sociology, Morehead State College, Morehead, Kentucky. My thesis is that decision making should afford the core around which classroom instruction should be organized. Students are not likely to learn to make better decisions except as they receive guided and critically oriented exercises in the decision-making process. Since decision making is to be the focus of social studies instruction, the teacher of the various areas in the social studies will need to introduce vastly larger quantities of factual information into the classroom. Drill in memorizing a few basic facts will never suffice. The superficial coverage of one textbook will never be enough.

Lafayette Parker, Professor of Education, Winston-Salem State College, Winston-Salem, North Carolina. The subject matter is organized into topics drawing upon several references and resources. A textbook is used, but many references are also used since the textbook is not complete enough for the course. The topics are composed of problems and questions to be studied and clarified. The lecture method is infrequently employed. Rather, discussions designed to help the students to think, to grow, to develop, and to mature are the rule. Audio-visual aids are used in the program. Experts on particular phases of the subject are invited. Co-workers share in organizing the subject matter as well as in serving as consultants.

Ina Faye W. VanNoppen, Professor of History, Appalachian State Teachers College Boone, North Carolina. In the survey course in American History which is required of all our students, the subject matter is fixed to a certain extent by the textbook selected. I favor a brief text that is little more than an outline. The chronological organization forms the framework which is essential for the development of a historical sense. The topical chapters serve to give meaning. The students master the textbook. The teacher's task is to have a vast storehouse of information from which to draw, which is constantly enriched by keeping up with new books and scholarly writings. From this storehouse the teacher illustrates the influences that have shaped public opinion, attitudes, and aims. Exercises in the historical method will give students experience in collecting and comparing data and formulating conclusions.

Cooperative Relations with Colleagues

Mary Tom Berry, Assistant Professor of Elementary Education, Middle Tennessee State College, Murfreesboro. As a member of a department of 14 staff members, cooperative teaching relationships with colleagues exist because of a number of reasons. Instructional and administrative problems are thoroughly discussed in staff meetings each week so that each staff member has a clear idea of any point in question. We have a department chairman who is democratic and considerate in dealings with his staff. A team spirit prevails, indicated by the spontaneous volunteering to fill in for a colleague who cannot meet a class. Our staff has pleasant social as well as professional relationships. The freedom to disagree on issues has not resulted in any unpleasant personal relationship of any major consequence, and differences of opinion are freely expressed.

Walter H. Ellis, Associate Professor of Chemistry, Florida Agricultural and Mechanical University, Tallahassee. Teachers attempt to study content of prerequisite courses and to inform each other of the contents of their own courses. In this way there is little duplication of effort. Teachers also try to inform each other of their individual philosophy and general approach. In addition our colleagues are asked to react to new innovations and new teaching aids, and creative materials which a given instructor may be in the process of developing.

John McGechaen, Professor of Education, University of British Columbia, Vancouver. To help acquaint new teachers with the techniques and philosophy of the school, a "Dean's Seminar" was organized, which was simply a voluntary and informal lunch-hour gathering of the staff at fairly frequent intervals. At first, those engaged in teaching courses in curriculum and instruction undertook to explain their aims and purposes and to point out what observers should look for in the classroom work of the students. Later, such subjects as philosophy, evaluation, measurements, special education, comparative education, were introduced. The seminars are regarded as an imoortant contribution to the vitality of the College and to the professional growth of its members. Two other important inter-relationships with colleagues should be mentioned, namely, department meetings and demonstration lessons. At frequent intervals the head of each department or course calls the staff together to discuss the work being done. Those having problems are expected to discuss them and in turn may expect help in solving them. Younger members of the staff are encouraged to seek assistance from more experienced members who, of course, frequently learn much from their younger colleagues. Demonstration lessons provide a valuable contact with outstanding colleagues in the field. By watching them teach as we do when we accompany our students to their classes, or by teaching for them as we are sometimes asked to do, we establish not only a valuable liaison between college and classroom but also a fertile ground for personal growth and improvement.

J. Donald Hawk, Professor of Education, Tift College, Forsyth, Georgia. Members of the faculty work jointly on certain courses and on a number of committees and projects. For example, this college offers a course entitled Science for the Elementary School Teacher. This course is offered on Saturdays for public school teachers. A faculty member serves as the coordinator in which he, and a biology and a chemistry professor, cooperatively plan and teach the course. The same type of arrangement in a course in World Geography, involves personnel from the education, history, and religion departments working together.

Haskell C. Phillips, Professor of Biology, Austin Peay State College, Clarksville, Tennessee. I believe that the success of our basic biology course is caused primarily by the fact that it involves the whole department. Each member of the staff teaches at least one section. This has two advantages: first it assures that each instructor teaching an advanced course, will know what knowledge had been presented to each of his students in the basic course; and second, it takes advantage of the specialized skills of each person to improve the basic course as a whole. Before the beginning of each quarter, a detailed, day-by-day syllabus is developed or revised with each member of the staff participating. Once the syllabus is elaborated, each instructor is free to use his own methods of presentation, but insofar as topics to be covered are concerned, there is no flexibility. This has decided advantages in that if one teacher is absent someone else can continue his class with a minimum loss to the students. A student who must change sections at the beginning of a quarter may also do so with no loss.

CHAPTER 5

Evaluation of the Seminars

The seminars entailed much work for the Subcommittee on the Improvement of Instruction, expense on the part of the American Association of Colleges for Teacher Education, time and energy for the participants, and cost for the institutions sending representatives. Members of each of these groups no doubt asked the question: Were the seminars valuable? The Subcommittee was extremely interested also in this question and asked it of the professors before they returned to their respective campuses. Later a questionnaire was sent to the Louisville participants. Their reactions partially evaluate the seminar.

Although only eighteen questionnaires were returned, the responses indicated that after eight months the initial favorable glow toward the seminar had not disappeared. Three individuals added cover letters indicating their positive reactions. Some excerpts should be mentioned:

"After eight months I am still quite enthusiastic about this type of conference and I should like to encourage the AACTE to provide the teachers throughout the country with this most excellent opportunity to meet with outstanding college and university teachers."

"I've been interested to learn how your other Seminars worked out. If they were as good as the Louisville meeting, you should be well pleased. I thought we had an exceptionally fine group of people there, and everything ran so smoothly, for which you should take a lot of credit."

An analysis of the responses to the questions has been tabulated:

1. Do you think that the participation in the workshop has made a difference in your professional life (i.e., teaching objectives, teaching techniques, organization of courses, measurement of students, self-evaluation, in-

terpersonal relations with students, inter-personal relations with colleagues, etc.)?

Comment	Number
Yes	12
No	4
Not answered	2

Some of the changes indicated:

Changes	Number
Techniques improved	6
Self-evaluation as to purposes	3
Objectives more clearly defined	3
More awareness of personal relations with students and colleagues	3
Revised course outlines	1
Re-worked objectives of department in teacher training	1
More flexibility	1
Inspired by seminar	1
Increased effort to show each student his instructor has faith in him	1

Some specific comments on question 1 were:

"The broad study of the teaching role was helpful and very inspirational. It renewed my enthusiasm for more constant and consistent study."

"We revised the requirements for people who are certifying. We now have a teaching major for prospective teachers which is different from the straight biology major."

"I have made an effort to show every student that I have faith in him. I have given more encouragement and have had more conferences with students."

2. Has the workshop stimulated you to do something about your teaching which you would not have done had you not attended the workshop (i.e., write an article, begin some research, develop some new plans for a course, read a book suggested at the workshop, correspond with fellow colleagues whom you met at the workshop, etc.)?

Yes	14
No	2
Indefinite	2

Some of the outcomes cited were:

Outcomes	Number
Extra reading	6
Correspondence with colleagues met at the Seminar	2
New and different course plans developed	2
Thesis research developed	1
Research	1
Effect on state study of teacher education	1

Some significant quotations are:

"At present I am chairman of a state committee on English for the re-study of teacher preparation. In preparing a written report I attempted to incorporate into the objectives of teacher-education programs in English for my state some of the objectives which were suggested by various teachers at the Louisville Conference."

"I consider the Seminar one of my most liberalizing experiences. I believe I am better equipped to provide liberalizing experiences for students, as a result."

3. Have any other faculty members benefited from your attendance at the workshop (i.e., through written re-

ports, formal oral presentations to university, school, or department, through informal discussions, etc.)?

Yes	14
No	2
Unanswered	2

Responses showed the following accomplishments:

Follow-through	Number
Reports to departments	6
Reports to the entire college faculty	5
Conference's findings were summarized and mimeographed (including those who shared working papers with colleagues)	5
Informal discussions	5
Report written on Seminar	1
Institutional plans to look more closely at college teaching	1
Monthly meetings set up by AAUP using the format of the Louisville meetings	1
Influence on colleagues through the reading of one of the working papers	1

4. Have you developed any plans for future action not listed in Questions 1 to 3 which you plan to carry out later?

Yes	10
No	5
Unanswered	8

These answers tended to overlap previous questions, but some comments are indicative of the answers to Question 4. These are:

Future Plans	Number
Plans for a similar seminar for the entire faculty	2
Further study of seminar results by the faculty	2
Research proposals planned	2
Plan to continue to circulate working papers	1
Evaluation to be made of students who are in teacher education	1
Plan to correspond with and visit other faculty members who were at the Seminar	1
Similar seminars for department and related departments	1
Utilization of material in a formal class situation	1

Although there was no follow-up questionnaire of the Portland seminar, the evaluations at the time of the seminar gave the Subcommittee some clues as to its value. Specific reactions of a mechanical nature were received concerning the small discussion groups, the general preparation of the seminar, the reports of the recorders, and the working papers. Many of these reactions evaluated procedures used at the conference, but they were of little value in answering the basic question. Some individuals suggested that the Subcommittee on the Improvement of Instruction should organize or be responsible for organizing seminars of a similar nature annually in each state in order that more faculty members would be involved. After that, it was suggested that each college follow up with a similar seminar on its own campus.

Considerable negative reaction was voiced against the egocentric emphasis found in the papers. It seemed to some of the participants that the discussions strayed away from the central theme of the seminar, the improvement of college teaching. Others voiced their opinion that professors of education forced "subject-matter" teachers to deal with the pedagogical aspects of their subjects. Considerable attention was given to the problem of how the pertinent points brought out in the conference could be conveyed to their respective colleagues. Fourteen individuals felt that reports by the participants should be made to their own faculties. Twelve thought the worthwhile papers should be published. A number of the professors indicated that they would be expected to report at faculty meetings, make a report to the president, and two expected to conduct some seminars.

The Subcommittee would have to evaluate these seminars by asking the questions: To what extent were the objectives achieved? Did the seminars identify the characteristics of good college teachers and good teaching? Did the seminars identify factors which facilitate or inhibit good teaching? Did the seminars identify ways in which faculties could be motivated to self-study and self-improvement?

In order to achieve these objectives the papers and discussion groups were organized around the following questions:

1. What are the purposes in teaching?

2. What are the most effective procedures in planning and teaching?

3. How does professional development continue?

4. How is success as a teacher determined?

5. What inter-relationships with students and colleagues contribute to the teacher's effectiveness?

6. What conditions and policies at an institution contribute to the effectiveness of its teachers?

How much the individual professor gained from these seminars depended to a great extent upon himself. If he were receptive and interested in analyzing the problem; willing to weigh his shortcomings against his strengths; willing to entertain different and even new points of view; willing to change his attitudes, techniques, even his philosophy, and at least pragmatically to test some of the ideas to which he was exposed at the conference, then the seminar was of value to him. Although there were some participants who were unwilling to entertain ideas or points of view different from their own, the Subcommittee feels that the majority of the participants did profit from these seminars.

How much the cooperating colleges gained from the seminars depends on the receptivity of the respective faculties. If they are willing to listen to the reports of the participants, if they are willing to study the problems of teaching, if they are willing to address themselves to the means of improving college teaching through in-service work or similar seminars, then these seminars will have been of some value. The Subcommittee did not anticipate that revolutionary changes would result. The Subcommittee did hope that some of the enthusiasm engendered at the seminars would be carried back home, and that colleagues of the participants would address themselves to the same questions which had formed the bases for the seminars. The evaluations indicate that this has happened in some places.

How much did the American Association of Colleges for Teacher Education gain from the seminars? The Association did come to grips with one of the basic problems in higher education today. The number of organizations addressing themselves to the same question attests to the importance of this issue. The Association indicated that it is aware of a basic problem. The dissemination of this report will make available to all member institutions the highlights of the working papers. Although it was impossible to reproduce all the papers, some of the valuable suggestions made at the seminars are now available. These ideas can help each reader improve his own teaching. Administrators, now that they have a model, may be encouraged to organize similar seminars on their own campus. In addition they have concrete suggestions for the improvement of college teaching made by teachers who were considered successful by their administration. They also have illustrations of actual practices which some superior professors found to be effective. These may not have been subjected to an empirical test, but many have survived the pragmatic test.

Many studies have been made regarding the characteristics of the good teacher. So far there is no unanimity on the elements of good teaching. No qualities seem to be so essential that their absence results in failure or their presence assures success. Thus, these seminars did not succeed in finding the sine qua non for the successful college teachers. As the highlights revealed, there were some elements, attitudes, techniques and relationships with colleagues or students which seemed to have value. Even had these not been forthcoming, the very fact that professors from various campuses in two sections of the United States addressed themselves to the problems of college teaching and sought means to improve it would indicate that the seminars were valuable.

The Subcommittee feels too that these seminars had value in that they accomplished many of the objectives sought. They did "pick the brains" of successful college teachers. They did contribute to the improvement of college instruction. They also recognized successful teachers, and thereby stated that this dimension of the university program is important. Unfortunately the modesty of some of the participants tended to soften the power with which they presented their personal convictions, techniques, and feelings.

CHAPTER 6

Suggestions for the Improvement of College Teaching

It is important to note that despite criticism of college teaching and frequent allusions to the colorless professor who is not only incompetent but also dull, we should recognize that college teaching as well as elementary and secondary school instruction has improved since colonial days. If there is any doubt about this, there is a description of a student's day at Harvard, ably described by Samuel Morison in Harvard College in the Seventeenth Century.[1] If further enlightenment about progress in this area over a longer period of time is needed there is Noah Fehl's Idea of a University in East and West.[2] On the other hand, we can not ignore the fact that college instruction should be better than it is.

Before positive suggestions for betterment are made, some obstacles to the improvement of college teaching must be mentioned. Elimination of some of these impediments, or at least a recognition of them, and a willingness to grapple with them would promote better teaching. Although this problem is not as serious as it once was, those institutions which do not permit the faculty member to search for truth and teach this truth, when based upon the canons of his academic discipline, will certainly have mediocre instruction. The professor who must always look over his shoulder will never inspire students. If he distorts truth in order to please some vested interests, the students will not respect him. Nor will he respect himself.

It seems imperative that academic freedom be considered a first prerequisite for good teaching. At the same time we should be careful of the extremist who hides behind the cloak of academic freedom to expound his dissident views, and who penalizes the student who will not accept the unusual position which he presents in class. This pseudo-scholar often is a poor teacher, despite his enthusiasm and virility, his followers, and the attention which he draws to himself as he plays the role of martyr. The liberty which the teacher desires must be extended to the colleagues who disagree with him and to the students who challenge him. He need not be silenced, but he should be made aware of the fact that the same rights which he cherishes must be extended to others and that there is no freedom without responsibility.

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[1] Morison, Samuel E. Harvard College in the Seventeenth Century. Cambridge: Harvard University Press, 1936.

[2] Fehl, Noah E. Idea of a University in East and West. New York: International Publications Service.

If we want good teaching on the college level, recognition for success in this area must be given to the professor. The rewards for merit in the academic world are promotions, salary increases, time to do an adequate job in preparation for classes and grading papers, and general recognition. At present the notion of "publish or perish" still persists. The returns from a questionnaire circulated by the Subcommittee on the Improvement of Instruction to administrators and college representatives of the American Association of Colleges for Teacher Education some years ago did not substantiate this persistent attitude. It may be true (as some people feel) that while administrators admit that a good teacher could be rewarded solely for his teaching ability by promotion to the highest rung of the academic ladder and by normal salary increments, actual practice is otherwise. Thus, whether "publish or perish" is a myth or a fact is hard to substantiate by objective means. Professors, like all other human beings, will try to gain success through the most rewarding means. Then teaching will not receive the attention it should, and the professor will give his major emphasis to research and writing and, in lack-lustre form, repeat the same old stale lecture notes which he has presented year after year. Generally administrators are blamed for this unhealthy condition. They are supposedly responsible for counting the lines of publications and determining promotions and salary increases upon this basis. Actually faculty members often encourage this same attitude. In institutions where faculty members serve on committees which advise or determine promotions and salary adjustments, professors are often the most vehement advocates of the position that writing and research are indispensable for promotion. They often are more adament than the administrators. Perhaps they have become entrenched in a system and cannot break from tradition. Perhaps that was the basis for their promotions. Hence, if they met these requirements, they would expect others to meet them also.

The interesting aspect of this whole matter is the mistaken idea that the evaluation of publications is automatically more objective than the judgment of teaching. It is true that there is a possibility that the appraisal of a piece of research might not be as subjective as the judgment of a professor's teaching ability when the latter is based purely on the reports of students and the feelings developed from contacts with colleagues. However, one wonders how much of the writing of the faculty member has acutally been read before a promotion is awarded or a salary adjustment made. Even so, the bias and ignorance of the readers intervene, and the same reports of research are subjectively evaluated by various faculty and administrators from poor to good. We seem to have a faith in the printed word, its influence and measurability which is inconsistent with our scientific and objective attitudes in other fields. It is often said that a book written by a professor will affect more people or give the university more recognition than years of teaching. Like teaching, the book may bring repute or disrepute upon the university. It may attract or repel students. Even if it does attract some, they may soon be disillusioned upon actually making contact with the instructor. It is doubtful if there is any valid research to support one side or the other of this question. Which has had the most lasting effect, a book or a certain professor? Which has been responsible for the greatest change within the individual, some paragraphs of a book written by a professor or five minutes of an outstanding lecture or of spirited class discussion? Which has stimulated the most thinking? In all fairness we must compare books written by professors with classes taught by professors of the same calibre. It is doubtful whether our faith in the objectivity in evaluating publications or their influence is warranted.

Closely associated with the previous problem is the present scramble for grants for research projects. Since universities are generally hard pressed for funds, foundation grants or other financial aids given to special projects by non-university organizations are sought. Many of these are extremely valuable and make possible studies which otherwise would be neglected. In order to obtain these grants, certain inducements are given to professors. Freedom from routine activities, extra funds for special study or travel, public recognition in newspapers and house organs all contribute to a flurry of activities, to preparation of a research proposal and an elaborate prospectus which may entice some special funds for the professor trying to get into the limelight through this popular means of recognition. If international travel is an added bait, the scurrying for these grants becomes even more fervent. For many a professor this soon means freedom from teaching classes, talking to students, and grading papers. He now can spend a major portion of his time researching some personal interest free from financial worries. Although much of this has value in increasing our storehouse of knowledge and in searching for truth, frequently the rewards in this area are greater than those for outstanding teaching. As a result teaching declines to secondary importance. Where these attitudes prevail there will be little hope for the improvement of college teaching. It is certainly more glamorous to serve as advisor in some foreign country or to carry on research in distant lands than trudge across the same campus to the same classroom filled to overflowing.

In many cases the professor holds more loyalty to his discipline than he does to his own institution. He would rather be recognized by his peers in his field of specialty throughout the country than be recognized by his students or his own administration. This recognition is achieved by the reading of scholarly papers at the meetings of his professional organization, by publishing articles in the professional journals, by holding important offices or serving on important commissions of his professional organization, or writing books in his discipline. If these activities are successful they may even lead to a Pulitzer Prize. If not quite so successful, these activities will lead to job offers from other institutions which can be used as a lever to increase pay at one's own institution. Worthy as many of these activities may be, they become so alluring that often other professorial responsibilities suffer, and the one that suffers frequently is teaching itself.

As long as we live in a society where financial rewards and promotions are earmarks of success, most of the individuals in the teaching profession will be motivated by them. If we truly believe that teaching must be improved, we will have to "put our money where our mouth is." Good teaching may be hard to measure but if the same standards of measurement were applied to publications, participation in professional organizations, serving as advisors on overseas projects, and the like, we would find the latter also difficult to measure.

No doubt we still need more discussion and research on what is good teaching. We need a greater clarification of the characteristics of a good teacher. As long as human beings do the teaching, there will be individual differences, and the techniques which make one teacher successful will cause another to fail. Despite these human differences, and regardless of the fact that the various disciplines have different goals and may have different epistemological bases, a few assumptions can be made. The first is that higher institutions of learning are for students. They are not supported and operated to give jobs to scholars. They are not welfare agencies for eggheads. Most professors would subscribe to this proposition. Sometimes they forget it in practice. Occasionally a professor truly believes that college teaching would be wonderful if it weren't for the students. If students come to the university to learn, and if the institutions of higher learning are supported so that students will learn, then students are the most important ingredient in the university, and all teaching, research, services, and ancillary activities ought to promote the basic purpose of the institution.

Assuming that learning involves behavioral change, both overt and covert, then the elements of teaching need not be as nebulous as some of the pessimists would have us believe. It does mean that good teaching requires goals. Most probably there are few college professors who do not have some objective for their courses, even if they be no more than "covering the material in the syllabus." The fundamental question is, do they have goals which are consonant with the purposes of a university, their discipline, and the needs of their students and which will result in behavioral changes? Are they truly interested in the student? Is he just a number in a classroom, a necessary evil who must be tolerated in order to draw a paycheck? Do they recognize that he is the prime concern of the university? Do they really have respect for each student in the class—poor or wealthy, Republican or Democrat, white or colored, Catholic or Protestant, genius or average, male or female, introvert or extrovert, docile or irritating? Do they try to empathize with the student? Do they try to help each student build up his own self image? Do they actually recognize the student as a collaborator in the search for truth, a fellow learner, a human being with dignity and worth? Teaching will never be improved when it results merely in self-gratification, no matter how erudite the lecture or how silver-tongued the oratory. Many a professor judges his success by the compliments he receives on the dramatic qualities of his presentation or the obscurity of his language. If he has combined erudition and oratory to their highest degree, then his ego has been satisfied. He places himself ahead of the student.

Although the various departments of the college have different purposes, and although professors of art might justifiably encourage creativity and esthetic appreciation and professors of philosophy promote thinking, there are some basic goals which a university should accept. The student should have achieved some of these goals or made noticeable progress toward them before graduation. Instruction will be improved as these goals are defined, understood, practiced, and progress toward them assessed. Critical thinking must always stand high among these objectives. If universities are engaged in the search for truth, then students must be taught to think critically and must be evaluated on this basis. In many of the disciplines instruction could be improved immeasurably if the instructors were aware of this goal. Their tests would not require the regurgitation of inert information or even of the professor's position regarding a facet of history, a sociological theory, a writer, or artist. If professors were truly committed to this one principle, classes would be enlivened and instruction would be materially improved. Critical thinking involves problems. It also requires facts and information. It means that hypotheses have to be challenged and tested. Conclusions have to be drawn after alternatives have been considered and logically or scientifically validated.

Some disciplines in the university will be most concerned with the development of sound values. It is not possible in this report to become involved in the question of which values should be taught, and whether they are absolute or relative. However, if there is no purpose to life, then we can say with Socrates that "the unexamined life is not worth living." In a day when sciences are highly important, the danger of ignoring the humanities is a constant threat. Whether or not the humanities have a corner on values is also not worth debating at this time. In a country generally committed to democracy as a way of life, we have some values which should be explored, understood, and taught! The committed teacher generally is more effective than the jelly-fish, who has neither purpose nor spine. Commitment to values, whether they be in terms of a scientific principle or the esthetic appreciation of beauty, would do much for the improvement of college teaching. In a democracy we have a right to assume that some values are more worthy than others.

Good teaching also depends upon sound scholarship. The reader may object that this has not been mentioned previously. There is no attempt to rank the elements being discussed. It is impossible to discuss all the component parts of good teaching in the same paragraph. The search for truth is only possible by the elimination of error and the dispelling of ignorance. A thorough familiarity with one's own discipline is necessary if the professor is to do critical thinking himself, much more if he is trying to promote it in his students. It is needed if there is to be an implementation of values. The danger is that scholarship often becomes an end in itself. Sometimes it is even a veneer or a means of escaping the world of reality. Scholarship should also become a basis for dealing with the crucial problems faced by man. These problems vary from the personal to the international. Teaching could be improved if professors would realize that they must assist the students in making a relationship between the subject matter being studied and the problems of man and society. This would help to make subject matter meaningful and would motivate students. Students are interested in the problems about them as any small group discussion in a dormitory or fraternity house will attest.

Although there no doubt are other goals to which a university should subscribe, there is one more that should be mentioned because it is controversial and often misunderstood. Cooperation, that is, working, living, and studying together is needed if the world is to survive. This is true in our own country as well as throughout the world. If racism continues, our country will be doomed. If national interests are sought without regard to those of other countries, armed conflict will follow. Getting along with others is not only an intellectual experience. It must be lived to be learned. The improvement of instruction is also dependent upon this element.

Much has been said about objectives in this section, and the impression should not remain that one goal is as good as another or that the determination of an objective is the only element in good teaching. However, it must be perfectly clear that we must know where we are going when we embark on a journey. We must have a destination in mind. After that has been determined we can choose the most appropriate means of reaching the destination. Instruction can be improved if faculty clearly understand the purposes of higher education; especially in the United States; the purposes of their own college; and finally the purposes of their discipline. As these are brought together into a consistent and harmonious whole and then brought into sharp focus as the teacher prepares for each class, much extraneous material will be eliminated, tangential excursions into the realm of the trivial will be reduced, and students and teachers together will embark on an exciting journey.

The improvement of college teaching is also dependent upon an understanding of how students learn. If students are not receptive to methods or mannerisms employed by the professor, they may refrain from open rebellion, but their passivity will result in little learning. College instruction will never improve when the professor feels it is merely his responsibility to dish out the gems of his discipline in any manner that he desires, and that it is the student's responsibility to accept them. The heartening thing is that the discussion of methods of teaching is no longer limited to classes in education. The seminars sponsored by this Subcommittee indicated that superior teachers in all disciplines are concerned with methodology, even if the word still remains anathema to some. The seminars also showed that no single subject specialty had all the answers regarding techniques of teaching. With larger and larger classes, and less and less opportunity for individual conferences between teacher and student, newer media and techniques are becoming more important. The automobile is not an end in itself. It is merely a means of transportation. The type of automobile may make a great deal of difference whether we enjoy the journey and whether we learn something from the trip. If the automobile must repeatedly be taken into the garage for repairs on the journey, the entire trip may be distasteful. However, if the means of transportation facilitates reaching the destination, makes the journey pleasant, and permits us to focus our attention on the experiences enroute rather than on the means of conveyance, the journey will be a rich one. Also, techniques should not be an end in themselves. The technique which may be effective for one professor or one group of students may be unsatisfactory for another. Frequently however, there are techniques which could be used successfully by many instructors. Often the instructor is unaware of the fact that there are other methods of teaching in addition to those used when he was a student. The successful professor will then be interested in understanding how students learn, because the university operates for them. He will be interested in reading about techniques of teaching which have been tried on the college level. He will want to share experiences about methodology with his colleagues. Here in-service work seems to offer a real possibility for the improvement of college teaching.

Finally college teaching should contain another element—evaluation. This includes not only an assessment of the students' achievements, but also a measure of the instructor's performance, how nearly he reached the goals of his course, his discipline, his institution, and of higher education in general. Never to evaluate, means never to know whether the destination has been attained. Here again the college instructor must be assisted to make him aware of techniques of student and self-evaluation. Much scientific research has been done in this area. In-service programs focused on this topic can be of extreme value.

College teaching can also be improved if the graduate students who plan to enter this field have some training in the areas already mentioned. As long as knowledge of subject matter seems to be the only prerequisite for university teaching, then this alone will be considered essential. Young college instructors will expect to teach as they were taught. If they are perceptive, they will model their teaching upon the techniques used by their outstanding teachers. If, however, they were only interested in the subject matter and were self-motivated, they may not be aware of the fact their students may not have the same love for the subject matter which they hold. Thus, some formal training in the history, philosophy, and psychology of education would be beneficial to them. Added to this some student teaching or internship on the college level under good guidance would offer some possibilities for the preparation of better college instructors. At least the young college teacher would not have to learn about college teaching solely through experience. Some students might also be saved some umpleasant incidents. Reference has already been made to in-service education, which could focus on the topics referred to in this chapter. A system of supervision by the department chairman would also offer some possibilities for the improvement of instruction. This is based upon the assumption that the department chairman is cognizant of the elements of good teaching and is competent while observing the neophyte and able to develop rapport with him.

Much has been written in this report concerning the seminars which were sponsored by the Subcommittee on the Improvement of Instruction. Such seminars also serve as a possible means of improving instruction. These could be operated on an institutional level or in a geographical area for a number of institutions.

Although this publication has centered its attention on the improvement of teaching, it must be emphasized that research, service, and teaching are not incompatible. There is no desire to set up a dichotomy between research and teaching, or to infer that success in one area precludes success in the other. The task of this Subcommittee was to grapple with the problem of improving teaching. It had no responsibilities regarding the improvement of research or university services to the community or society in general. Nor was the committee charged with the responsibility of the total improvement of the college faculty member. Thus, the emphasis in these pages has been on instruction. Unless recognition be given to achievement in the area of teaching, faculty members will soon become aware of how little it is esteemed in the university's hierarchy of values and they will react accordingly.

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